

BEFORE SUBMITTING YOUR BID

- 1. Use pen and ink to complete the Bid.**
- 2. Have you signed and completed the Contract Agreement, Offer & Award Forms?**
- 3. As a minimum, the Bidder will submit a Bid Package consisting of the Notice to Contractors, the completed Acknowledgement of Bid Amendments & Submission of Bid Bond Validation Number form, the completed Schedule of Items, 2 copies of the completed Agreement, Offer, & Award form, a Bid Bond or Bid Guarantee, and any other Certifications or Bid Requirements listed in the Bid Book.**
- 4. Have you included prices for all Bid Items? (“Zero is not considered a bid price.”)**
- 5. Have you included a bid guarantee? Acceptable forms are:**
 - A. Bid Bond on the Department’s prescribed form for 5% of the Bid Amount. (Or forms that do not contain any significant variations from the Department’s forms as solely determined by the Department.)**
 - B. Official Bank Check, Cashier’s Check, Certified Check, U.S. Postal Money Order or Negotiable Certificate of Deposit in the amount stated in the Notice to Contractors.**
- 6. If the written Bid is to be sent, Federal Express overnight delivery is suggested as the package is delivered directly to the DOT Headquarters Building in Winthrop. Other means, such as U.S. Postal Services’ Express Mail has proven not to be reliable.**

AND FOR FEDERAL AID PROJECTS

- 7. Have you included your DBE Utilization commitment in the proper amounts and signed the DBE Certification?**

If you need further information regarding Bid preparation, call the DOT Contracts Section at (207)624-3430.

For complete specifications regarding bidding requirements, refer to Section 102 of the Maine Department of Transportation, Standard Specifications, Revision December 2002.

NOTICE

The Maine Department of Transportation is attempting to improve the way Bid Amendments/Addendums are handled, and allow for an electronic downloading of bid packages from our website, while continuing to maintain a planholders list.

Prospective bidders, subcontractors or suppliers who wish to download a copy of the bid package and receive a courtesy notification of project specific bid amendments, must provide an email address to Diane Barnes at the MDOT Contracts mailbox at: MDOT.contracts@maine.gov. Each bid package will require a separate request. Please provide us an email address, so we can maintain the planholders list that both the industry and MDOT uses.

Additionally, the new Acknowledgement of Bid Amendment form will be placed in MDOT bid packages beginning with the 2/12/03 advertisements. After that date, interested parties will be responsible for reviewing and retrieving the Bid Amendments from our web site, and acknowledging receipt and incorporating those Bid Amendments in their bids.

The downloading of bid packages from the MDOT website is not the same as providing an electronic bid to the Department. Electronic bids must be submitted via <http://www.BIDX.com>. For information on electronic bidding contact Rebecca Pooler at rebecca.pooler@maine.gov.

STATE OF MAINE DEPARTMENT OF TRANSPORTATION
Bid Guaranty-Bid Bond Form

KNOW ALL MEN BY THESE PRESENTS THAT _____

_____, of the City/Town of _____ and State of _____

as Principal, and _____ as Surety, a

Corporation duly organized under the laws of the State of _____ and having a usual place of

Business in _____ and hereby held and firmly bound unto the Treasurer of

the State of Maine in the sum of _____ for payment which Principal and Surety bind

themselves, their heirs, executors, administrators, successors and assigns, jointly and severally.

The condition of this obligation is that the Principal has submitted to the Maine Department of

Transportation, hereafter Department, a certain bid, attached hereto and incorporated as a

part herein, to enter into a written contract for the construction of _____

_____ and if the Department shall accept said bid

and the Principal shall execute and deliver a contract in the form attached hereto (properly

completed in accordance with said bid) and shall furnish bonds for this faithful performance of

said contract, and for the payment of all persons performing labor or furnishing material in

connection therewith, and shall in all other respects perform the agreement created by the

acceptance of said bid, then this obligation shall be null and void; otherwise it shall remain in full

force, and effect.

Signed and sealed this _____ day of _____ 20____

WITNESS:

WITNESS

PRINCIPAL:

By _____

By: _____

By: _____

SURETY:

By _____

By: _____

Name of Local Agency: _____

NOTICE

For security and other reasons, all Bid Packages which are mailed, shall be provided in double (one envelope inside the other) envelopes. The *Inner Envelope* shall have the following information provided on it:

Bid Enclosed - Do Not Open

PIN:

Town:

Date of Bid Opening:

Name of Contractor with mailing address and telephone number:

In Addition to the usual address information, the *Outer Envelope* should have written or typed on it:

Double Envelope: Bid Enclosed

PIN:

Town:

Date of Bid Opening:

Name of Contractor:

This should not be much of a change for those of you who use Federal Express or similar services.

Hand-carried Bids may be in one envelope as before, and should be marked with the following information:

Bid Enclosed: Do Not Open

PIN:

Town:

Name of Contractor:

INSTRUCTIONS FOR PREPARING THE CONTRACTOR'S DISADVANTAGED BUSINESS ENTERPRISE UTILIZATION PLAN

The Contractor Shall:

1. Submit a completed Contractor's Disadvantaged Business Enterprise Utilization Plan to the Contract's Engineer by 4:30 P.M. on the Bid day.
2. Extend equal opportunity to MDOT certified DBE firms (as listed in MDOT's DBE Directory of Certified Businesses) in the selection and utilization of Subcontractors and Suppliers.

SPECIFIC INSTRUCTIONS FOR COMPLETING THE FORM:

Insert Contractor name, the name of the person(s) preparing the form, and that person(s) telephone and fax number.

Provide total Bid price, Federal Project Identification Number, and location of the Project work.

In the columns, name each DBE firm to be used, provide the Unit or Item cost of the Work/Product to be provided by the DBE firm, give a brief description of the Work, and the dollar value of the Work.

If no DBE firm is to be utilized, the Contractor must document the reason(s) why no DBE firms are being used. Specific supporting evidence of good faith efforts taken by Contractors to solicit DBE Bidders must be attached. This evidence, as a minimum, includes phone logs, e-mail and/or mail DBE solicitation records, and the documented results of these solicitations.

NOTICE

The Department has revised the Disadvantaged Business Enterprise Proposed Utilization form and the procedure that has been used for the past several months for Contractors to submit the form.

The Apparent Low Bidder now must submit the form by close of Business (4:30 P.M.) on Bid day.

The new Contractor's Disadvantaged Business Enterprise Proposed Utilization Plan form contains additional information that is required by USDOT.

The Disadvantaged Business Enterprise Proposed Utilization Plan form will no longer be used. The new Contractor's Disadvantaged Business Enterprise Proposed Utilization Plan form must be used.

A copy of the new Contractor's Disadvantaged Business Enterprise Proposed Utilization Plan and instructions for completing it are attached.

Note: Questions about DBE firms, or to obtain a printed copy of the DBE Directory, contact Equal Opportunity at (207) 624-3066.

MDOTs DBE Directory of Certified firms can also be obtained at http://www.state.me.us/mdot/humnres/o_equalo/cdwbed_h.htm

NOTICE

Bidders:

Please use the attached “Request for Information” form when faxing questions and comments concerning specific Contracts that have been Advertised for Bid. Include additional numbered pages as required.

REQUEST FOR INFORMATION

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and extend across the width of the page. There are no margins, text, or other markings on the paper.

Bid Date: _____ **Fax:** (____) _____

RFI No: _____ RFI received: _____

Response:_____

[illegible]

Response By:_____ Date:_____

CONTRACTOR'S DISADVANTAGED BUSINESS ENTERPRISE PROPOSED UTILIZATION PLAN

Low Bidder shall furnish completed form to Contracts Section by 4:30 P.M. on Bid Opening day.

TO: MDOT Contracts Section
16 State House Station,
Augusta, Me 04333-0016
or
Fax: 207-624-3431

Contractor: _____
Prepared by: _____
Telephone: _____ Fax: _____

BID PRICE: \$ _____ FEDERAL PROJECT # _____ LOCATION: _____

TOTAL DBE PARTICIPATION AS A PERCENT OF TOTAL BID PRICE = _____ %

DBE Firm*	Unit/Item Cost	Unit #	Description of work & Item Number	Actual \$ Value
Total >				

If no DBE firm(s) are used, bidder must document efforts made to secure DBE participation and attach supporting evidence of this effort:

_____.

Examples: Bidder relies wholly upon low quote subcontractor section, DBE firm(s) were not low quote.
No DBE firms bid.

*Only DBE firms certified by MDOT prior to bidding can be utilized by Contractor for DBE credit.
Directory of certified DBEs is available on MDOT's website: www.state.me.us/mdot

Equal Opportunity Use:

Plan received ____/____/____ Verified by: _____ Action: _____



Office of Human Resources

Equal Opportunity

MAINE DEPARTMENT OF TRANSPORTATION

Certified Disadvantaged and Women Business Enterprise

DBE DIRECTORY - MINORITY OWNED

WBE DIRECTORY - WOMEN OWNED

WEBSITE FOR DIRECTORY CAN BE FOUND AT:

http://www.state.me.us/mdot/humnres/o_equalo/cdwbed_h.htm

It is the responsibility of the Contractor to access the DBE Directory at this site in order to have the most current listings.

STATE OF MAINE DEPARTMENT OF TRANSPORTATION NOTICE TO CONTRACTORS

Sealed Bids addressed to the Maine Department of Transportation, Augusta, Maine 04333 and endorsed on the wrapper "Bids for Wetlands Mitigation project in the town of New Gloucester" will be received from contractors at the Reception Desk, Temporary Transportation Building in Winthrop, Maine, until 11:00 o'clock A.M. (prevailing time) on July 16, 2003, and at that time and place publicly opened and read. There will be a statement of Bidders Qualifications submittal required by the Department as specified in the contract documents Special Provision 103.3 Post-Bid Qualifications for all bidders for this project. All other Bids will be rejected. MDOT is currently transitioning to provide for the option of electronic bidding. We now accept electronic bids for those bid packages posted on our electronic bid website. Electronic bids do not have to be accompanied by paper bids. Please note: the Department will accept a facsimile of the bid bond for the electronic bid; however, the original bid bond must then be received at the MDOT Contract Section within 72 hours of the bid opening. During this transition, dual bids (one paper, one electronic) will be accepted, with the paper copy taking precedence. For those who chose to submit a paper bid alone, nothing has changed.

Description: Maine Federal Aid Project No. NH-3517(90)E, PIN. 3517.90

Location: In Cumberland County, project is located along the west side of the Royal River between the river and MCRR tracks approx. 0.5 mi. north of Rte. 231 and approx. 0.5 mi. east of Cobbs Bridge Rd.

Outline of Work: Stream bank rehabilitation and soil bioengineering, stream bank and floodplain planting, mitigation excavation, seeding, and other incidental work.

The basis of award will be Section 0001.

For general information regarding Bidding and Contracting procedures, contact Bruce Carter at (207)624-3430. Our webpage at <http://www.state.me.us/mdot/project/design/homepg.htm> contains a copy of the schedule of items, Plan Holders List, written portions of bid amendments (not drawings), and bid results. For Project-specific information fax all questions to **Project Manager** Mark Lickus at (207)624-3101. Questions received after 12:00 noon of Monday prior to bid date will not be answered. Bidders shall not contact any other Departmental staff for clarification of Contract provisions, and the Department will not be responsible for any interpretations so obtained. Hearing impaired persons may call the Telecommunication Device for the Deaf at (207)287-3392.

This project will have a non-mandatory pre-bid meeting from 8:00am to 9:00 am July 9th 2003 in the Main Conference Room of the MDOT building in Winthrop.

Plans, specifications and bid forms may be seen at the Maine Department of Transportation, Temporary Transportation Building in Winthrop, Maine and at the Department of Transportation's Division VI Office in Scarborough. They may be purchased from the Department between the hours of 8:00 a.m. to 4:30 p.m. by cash, credit card (Visa/Mastercard) or check payable to Treasurer, State of Maine sent to Maine Department of Transportation, Attn.: Mailroom, 16 State House Station, Augusta, Maine 04333-0016. They also may be purchased by telephone at (207)624-3536 between the hours of 8:00 a.m. to 4:30 p.m. Full size plans \$14.00 (\$18.00 by mail). Half size plans \$7.00 (\$10.00 by mail), Bid Book \$10 (\$13 by mail), Single Sheets \$2, payment in advance, all non-refundable.

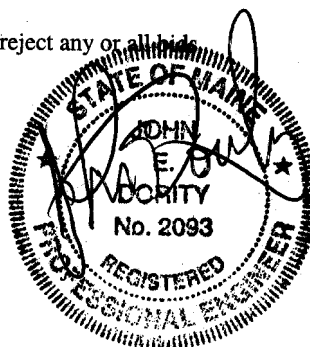
Each Bid must be made upon blank forms provided by the Department and must be accompanied by a bid bond at 5% of the bid amount or an official bank check, cashier's check, certified check, certificate of deposit, or United States postal money order in the amount of \$2,500.00 payable to Treasurer, State of Maine as a Bid guarantee. A Contract Performance Surety Bond and a Contract Payment Surety Bond, each in the amount of 100 percent of the Contract price, will be required of the successful Bidder.

This Contract is subject to all applicable Federal Laws. This contract is subject to compliance with the Disadvantaged Business Enterprise program requirements as set forth by the Maine Department of Transportation.

All work shall be governed by "State of Maine, Department of Transportation, Standard Specifications, Revision of December 2002", price \$10 [\$13 by mail], and Standard Details, Revision of December 2002, price \$20 [\$25 by mail]. Standard Detail updates can be found at <http://www.state.me.us/mdot/project/design/homepg.htm>

The right is hereby reserved to the MDOT to reject any or all bids.

Winthrop, Maine
July 2, 2003



JOHN E. DORITY
CHIEF ENGINEER

SPECIAL PROVISION 102.7.3
ACKNOWLEDGMENT OF BID AMENDMENTS
&
SUBMISSION OF BID BOND VALIDATION NUMBER (IF APPLICABLE)

With this form, the Bidder acknowledges its responsibility to check for all Amendments to the Bid Package. For each Project under Advertisement, Amendments are located at <http://www.state.me.us/mdot/project/design/schedule.htm>. It is the responsibility of the Bidder to determine if there are Amendments to the Project, to download them, and to incorporate them into their Bid Package. The Maine DOT will not post Bid Amendments any later than noon the day before Bid opening.

Amendment Number	Date

The Contractor, for itself, its successors and assigns, hereby acknowledges that it has received all of the above referenced Amendments to the Bid Package. Failure to acknowledge receipt of all Amendments to the Bid Package will be considered a Non-curable Bid Defect in accordance with Section 102.11.1 of the Standard Specifications, Revision of December 2002.

CONTRACTOR

Date

Signature of authorized representative

(Name and Title Printed)

Bid Bond Validation Number _____
(Applicable to annual bid bonds or electronic bid bonds.)

MAINE DEPARTMENT OF TRANSPORTATION

BID

DATE OF OPENING :

CALL ORDER :

CONTRACT ID : 003517.90

PROJECTS

NH-3517(90)E

COUNTY : CUMBERLAND

SCHEDULE OF ITEMS

REVISED:

CONTRACT ID: 003517.90

PROJECT(S): NH-3517(90)E

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS CTS	BID AMOUNT DOLLARS CTS
SECTION 0001 MITIGATION ITEMS				
0010	203.232 MITIGATION EXCAVATION	220.000 CY		
0020	607.15 DRIVE GATEWAY 16 FOOT - METAL	2.000 EA		
0030	610.08 PLAIN RIPRAP	3.000 CY		
0040	613.329 EXTENDED USE EROSION CONTROL BLANKETS - COIR	180.000 SY		
0050	614.10 COIR FIBER ROLL	160.000 LF		
0060	614.20 STREAMBANK REHABILITATION	175.000 SY		
0070	618.143 SPECIAL SEED MIX: ROYAL RIVER #1	10.000 UN		
0080	618.25 APPLIED WATER	5.000 MGAL		
0090	621.014 EVERGREEN TREES (18 INCH - 24 INCH) GROUP A	100.000 EA		
0100	621.225 LARGE DECIDUOUS TREES (18 INCH - 24 INCH) GROUP A	200.000 EA		

SCHEDULE OF ITEMS

REVISED:

CONTRACT ID: 003517.90

PROJECT(S): NH-3517(90)E

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0110	621.245 LARGE DECIDUOUS TREES (2 FOOT - 3 FOOT) GROUP A	410.000 EA				
0120	621.246 LARGE DECIDUOUS TREES (3 FOOT - 4 FOOT) GROUP A	100.000 EA				
0130	621.53 DECIDUOUS SHRUBS (8 INCH - 12 INCH) GROUP B	700.000 EA				
0140	621.54 DECIDUOUS SHRUBS (18 INCH - 24 INCH) GROUP A	270.000 EA				
0150	621.80 ESTABLISHMENT PERIOD	LUMP	LUMP			
0160	621.93 TREE SHELTERS	710.000 EA				
0170	629.05 HAND LABOR, STRAIGHT TIME	40.000 HR				
0180	631.171 TRUCK - SMALL (INCLUDING OPERATOR)	8.000 HR				
0190	631.19 MOWER MACHINE RENTAL (INCLUDING OPERATOR AND HAULER)	32.000 HR				
0200	659.10 MOBILIZATION	LUMP	LUMP			
	SECTION 0001 TOTAL					
	TOTAL BID					

CONTRACT AGREEMENT, OFFER & AWARD

AGREEMENT made on the date last signed below, by and between the State of Maine, acting through and by its Department of Transportation (Department), an agency of state government with its principal administrative offices located at 1705 U.S. Route 202, Winthrop, Maine, with a mailing address at 16 State House Station, Augusta, Maine 04333-0016, and (Name of the firm bidding the job) a corporation or other legal entity organized under the laws of the State of Maine, with its principal place of business located at (address of the firm bidding the job)

The Department and the Contractor, in consideration of the mutual promises set forth in this Agreement (the "Contract"), hereby agree as follows:

A. The Work.

The Contractor agrees to complete all Work as specified or indicated in the Contract including Extra Work in conformity with the Contract, PIN No. 1224.00, for the Hot Mix Asphalt Overlay in the town/city of West Eastport, County of Washington, Maine. The Work includes construction, maintenance during construction, warranty as provided in the Contract, and other incidental work.

The Contractor shall be responsible for furnishing all supervision, labor, equipment, tools supplies, permanent materials and temporary materials required to perform the Work including construction quality control including inspection, testing and documentation, all required documentation at the conclusion of the project, warranting its work and performing all other work indicated in the Contract.

The Department shall have the right to alter the nature and extent of the Work as provided in the Contract; payment to be made as provided in the same.

B. Time.

The Contractor agrees to complete all Work, except warranty work, on or before November 15, 2003. Further, the Department may deduct from moneys otherwise due the Contractor, not as a penalty, but as Liquidated Damages in accordance with Sections 107.7 and 107.8 of the State of Maine Department of Transportation Standard Specifications, Revision of December 2002.

C. Price.

The quantities given in the Schedule of Items of the Bid Package will be used as the basis for determining the original Contract amount and for determining the amounts of the required Performance Surety Bond and Payment Surety Bond, and that the amount of this offer is (Place bid here in alphabetical form such as One Hundred and Two dollars and 10 cents)
\$ (repeat bid here in numerical terms, such as \$102.10) Performance Bond and Payment Bond each being 100% of the amount of this Contract.

D. Contract.

This Contract, which may be amended, modified, or supplemented in writing only, consists of the Contract documents as defined in the Plans, Standard Specifications, Revision of December 2002, Standard Details Revision of December 2002, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds. It is agreed and understood that this Contract will be governed by the documents listed above.

E. Certifications.

By signing below, the Contractor hereby certifies that to the best of the Contractor's knowledge and belief:

1. All of the statements, representations, covenants, and/or certifications required or set forth in the Bid and the Bid Documents, including those in Appendix A to Division 100 of the Standard Specifications Revision of December 2002 (Federal Contract Provisions Supplement), and the Contract are still complete and accurate as of the date of this Agreement.
2. The Contractor knows of no legal, contractual, or financial impediment to entering into this Contract.
3. The person signing below is legally authorized by the Contractor to sign this Contract on behalf of the Contractor and to legally bind the Contractor to the terms of the Contract.

F. Offer.

The undersigned, having carefully examined the site of work, the Plans, Standard Specifications, Revision of December 2002, Standard Details Revision of December 2002, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds contained herein for construction of:

PIN 1234.00 West Eastport, Hot Mix Asphalt Overlay

State of Maine, on which bids will be received until the time specified in the "Notice to Contractors" do(es) hereby bid and offer to enter into this contract to supply all the materials, tools, equipment and labor to construct the whole of the Work in strict accordance with the terms and conditions of this Contract at the unit prices in the attached "Schedule of Items".

The Offeror agrees to perform the work required at the price specified above and in accordance with the bids provided in the attached "Schedule of Items" in strict accordance with the terms of this solicitation, and to provide the appropriate insurance and bonds if this offer is accepted by the Government in writing.

As Offeror also agrees:

First: To do any extra work, not covered by the attached "Schedule of Items", which may be ordered by the Resident, and to accept as full compensation the amount determined upon a "Force Account" basis as provided in the Standard Specifications, Revision of December 2002, and as addressed in the contract documents.

Second: That the bid bond at 5% of the bid amount or the official bank check, cashier's check, certificate of deposit or U. S. Postal Money Order in the amount given in the "Notice to Contractors", payable to the Treasurer of the State of Maine and accompanying this bid, shall be forfeited, as liquidated damages, if in case this bid is accepted, and the undersigned shall fail to abide by the terms and conditions of the offer and fail to furnish satisfactory insurance and Contract bonds under the conditions stipulated in the Specifications within 15 days of notice of intent to award the contract.

Third: To begin the Work on the date specified in the Engineer's "Notice to Commence Work" as stated in Section 107.2 of the Standard Specifications Revision of 2002 and complete the Work within the time limits given in the Special Provisions of this Contract.

Fourth: The Contractor will be bound to the Disadvantaged Business Enterprise (DBE) Requirements contained in the attached Notice (Additional Instructions to Bidders) and submit a completed Contractor's Disadvantaged Business Enterprise Utilization Plan by 4:30pm on the day of bid opening to the Contracts Engineer.

Fifth: That this offer shall remain open for 30 calendar days after the date of opening of bids.

Sixth: The Bidder hereby certifies, to the best of its knowledge and belief that: the Bidder has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of competitive bidding in connection with its bid, and its subsequent contract with the Department.

IN WITNESS WHEREOF, the Contractor, for itself, its successors and assigns, hereby execute two duplicate originals of this Agreement and thereby binds itself to all covenants, terms, and obligations contained in the Contract Documents

Date

(Witness Sign Here)
Witness

CONTRACTOR
(Sign Here)

(Signature of Legally Authorized Representative
of the Contractor)

(Print Name Here)
(Name and Title Printed)

G. Award.

Your offer is hereby accepted.
documents referenced herein.

This award consummates the Contract, and the

MAINE DEPARTMENT OF TRANSPORTATION

Date

By: David A. Cole, Commissioner

(Witness)

CONTRACT AGREEMENT, OFFER & AWARD

AGREEMENT made on the date last signed below, by and between the State of Maine, acting through and by its Department of Transportation (Department), an agency of state government with its principal administrative offices located at 1705 U.S. Route 202, Winthrop, Maine, with a mailing address at 16 State House Station, Augusta, Maine 04333-0016, and _____
a corporation or other legal entity organized under the laws of the State of Maine, with its principal place of business located at _____

The Department and the Contractor, in consideration of the mutual promises set forth in this Agreement (the "Contract"), hereby agree as follows:

A. The Work.

The Contractor agrees to complete all Work as specified or indicated in the Contract including Extra Work in conformity with the Contract, PIN No. **3517.90** for **Wetlands Mitigation** in the town of **New Gloucester**, County of **Cumberland** Maine. The Work includes construction, maintenance during construction, warranty as provided in the Contract, and other incidental work.

The Contractor shall be responsible for furnishing all supervision, labor, equipment, tools supplies, permanent materials and temporary materials required to perform the Work including construction quality control including inspection, testing and documentation, all required documentation at the conclusion of the project, warranting its work and performing all other work indicated in the Contract.

The Department shall have the right to alter the nature and extent of the Work as provided in the Contract; payment to be made as provided in the same.

B. Time.

The Contractor agrees to complete all Work, except warranty work, on or before **September 23, 2005**. Further, the Department may deduct from moneys otherwise due the Contractor, not as a penalty, but as Liquidated Damages in accordance with Sections 107.7 and 107.8 of the State of Maine Department of Transportation Standard Specifications, Revision of December 2002.

C. Price.

The quantities given in the Schedule of Items of the Bid Package will be used as the basis for determining the original Contract amount and for determining the amounts of the required Performance Surety Bond and Payment Surety Bond, and that the amount of this offer is _____

\$_____ Performance Bond and Payment Bond each being 100% of the amount of this Contract.

D. Contract.

This Contract, which may be amended, modified, or supplemented in writing only, consists of the Contract documents as defined in the Plans, Standard Specifications, Revision of December 2002, Standard Details Revision of December 2002 as updated through advertisement, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds. It is agreed and understood that this Contract will be governed by the documents listed above.

E. Certifications.

By signing below, the Contractor hereby certifies that to the best of the Contractor's knowledge and belief:

1. All of the statements, representations, covenants, and/or certifications required or set forth in the Bid and the Bid Documents, including those in Appendix A to Division 100 of the Standard Specifications Revision of December 2002 (Federal Contract Provisions Supplement), and the Contract are still complete and accurate as of the date of this Agreement.
2. The Contractor knows of no legal, contractual, or financial impediment to entering into this Contract.
3. The person signing below is legally authorized by the Contractor to sign this Contract on behalf of the Contractor and to legally bind the Contractor to the terms of the Contract.

F. Offer.

The undersigned, having carefully examined the site of work, the Plans, Standard Specifications Revision of December 2002, Standard Details Revision of December 2002 as updated through advertisement, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds contained herein for construction of:

PIN. 3517.90 – Wetlands Mitigation – in the town of New Gloucester,

State of Maine, on which bids will be received until the time specified in the “Notice to Contractors” do(es) hereby bid and offer to enter into this contract to supply all the materials, tools, equipment and labor to construct the whole of the Work in strict accordance with the terms and conditions of this Contract at the unit prices in the attached “Schedule of Items”.

The Offeror agrees to perform the work required at the price specified above and in accordance with the bids provided in the attached “Schedule of Items” in strict accordance with the terms of this solicitation, and to provide the appropriate insurance and bonds if this offer is accepted by the Government in writing.

As Offeror also agrees:

First: To do any extra work, not covered by the attached “Schedule of Items”, which may be ordered by the Resident, and to accept as full compensation the amount determined upon a “Force Account” basis as provided in the Standard Specifications, Revision of December 2002, and as addressed in the contract documents.

Second: That the bid bond at 5% of the bid amount or the official bank check, cashier’s check, certificate of deposit or U. S. Postal Money Order in the amount given in the “Notice to Contractors”, payable to the Treasurer of the State of Maine and accompanying this bid, shall be forfeited, as liquidated damages, if in case this bid is accepted, and the undersigned shall fail to abide by the terms and conditions of the offer and fail to furnish satisfactory insurance and Contract bonds under the conditions stipulated in the Specifications within 15 days of notice of intent to award the contract.

Third: To begin the Work on the date specified in the Engineer’s “Notice to Commence Work” as stated in Section 107.2 of the Standard Specifications Revision of December 2002 and complete the Work within the time limits given in the Special Provisions of this Contract.

Fourth: The Contractor will be bound to the Disadvantaged Business Enterprise (DBE) Requirements contained in the attached Notice (Additional Instructions to Bidders) and submit a completed Contractor’s Disadvantaged Business Enterprise Utilization Plan by 4:30pm on the day of bid opening to the Contracts Engineer.

Fifth: That this offer shall remain open for 30 calendar days after the date of opening of bids.

Sixth: The Bidder hereby certifies, to the best of its knowledge and belief that: the Bidder has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of competitive bidding in connection with its bid, and its subsequent contract with the Department.

IN WITNESS WHEREOF, the Contractor, for itself, its successors and assigns, hereby execute two duplicate originals of this Agreement and thereby binds itself to all covenants, terms, and obligations contained in the Contract Documents.

CONTRACTOR

Date

(Signature of Legally Authorized Representative
of the Contractor)

Witness

(Name and Title Printed)

G. Award.

Your offer is hereby accepted.
documents referenced herein.

This award consummates the Contract, and the

MAINE DEPARTMENT OF TRANSPORTATION

Date

By: David A. Cole, Commissioner

Witness

CONTRACT AGREEMENT, OFFER & AWARD

AGREEMENT made on the date last signed below, by and between the State of Maine, acting through and by its Department of Transportation (Department), an agency of state government with its principal administrative offices located at 1705 U.S. Route 202, Winthrop, Maine, with a mailing address at 16 State House Station, Augusta, Maine 04333-0016, and _____
a corporation or other legal entity organized under the laws of the State of Maine, with its principal place of business located at _____

The Department and the Contractor, in consideration of the mutual promises set forth in this Agreement (the "Contract"), hereby agree as follows:

A. The Work.

The Contractor agrees to complete all Work as specified or indicated in the Contract including Extra Work in conformity with the Contract, PIN No. **3517.90** for **Wetlands Mitigation** in the town of **New Gloucester**, County of **Cumberland** Maine. The Work includes construction, maintenance during construction, warranty as provided in the Contract, and other incidental work.

The Contractor shall be responsible for furnishing all supervision, labor, equipment, tools supplies, permanent materials and temporary materials required to perform the Work including construction quality control including inspection, testing and documentation, all required documentation at the conclusion of the project, warranting its work and performing all other work indicated in the Contract.

The Department shall have the right to alter the nature and extent of the Work as provided in the Contract; payment to be made as provided in the same.

B. Time.

The Contractor agrees to complete all Work, except warranty work, on or before **September 23, 2005**. Further, the Department may deduct from moneys otherwise due the Contractor, not as a penalty, but as Liquidated Damages in accordance with Sections 107.7 and 107.8 of the State of Maine Department of Transportation Standard Specifications, Revision of December 2002.

C. Price.

The quantities given in the Schedule of Items of the Bid Package will be used as the basis for determining the original Contract amount and for determining the amounts of the required Performance Surety Bond and Payment Surety Bond, and that the amount of this offer is _____

\$_____ Performance Bond and Payment Bond each being 100% of the amount of this Contract.

D. Contract.

This Contract, which may be amended, modified, or supplemented in writing only, consists of the Contract documents as defined in the Plans, Standard Specifications, Revision of December 2002, Standard Details Revision of December 2002 as updated through advertisement, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds. It is agreed and understood that this Contract will be governed by the documents listed above.

E. Certifications.

By signing below, the Contractor hereby certifies that to the best of the Contractor's knowledge and belief:

1. All of the statements, representations, covenants, and/or certifications required or set forth in the Bid and the Bid Documents, including those in Appendix A to Division 100 of the Standard Specifications Revision of December 2002 (Federal Contract Provisions Supplement), and the Contract are still complete and accurate as of the date of this Agreement.
2. The Contractor knows of no legal, contractual, or financial impediment to entering into this Contract.
3. The person signing below is legally authorized by the Contractor to sign this Contract on behalf of the Contractor and to legally bind the Contractor to the terms of the Contract.

F. Offer.

The undersigned, having carefully examined the site of work, the Plans, Standard Specifications Revision of December 2002, Standard Details Revision of December 2002 as updated through advertisement, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds contained herein for construction of:

PIN. 3517.90 – Wetlands Mitigation – in the town of New Gloucester,

State of Maine, on which bids will be received until the time specified in the “Notice to Contractors” do(es) hereby bid and offer to enter into this contract to supply all the materials, tools, equipment and labor to construct the whole of the Work in strict accordance with the terms and conditions of this Contract at the unit prices in the attached “Schedule of Items”.

The Offeror agrees to perform the work required at the price specified above and in accordance with the bids provided in the attached “Schedule of Items” in strict accordance with the terms of this solicitation, and to provide the appropriate insurance and bonds if this offer is accepted by the Government in writing.

As Offeror also agrees:

First: To do any extra work, not covered by the attached “Schedule of Items”, which may be ordered by the Resident, and to accept as full compensation the amount determined upon a “Force Account” basis as provided in the Standard Specifications, Revision of December 2002, and as addressed in the contract documents.

Second: That the bid bond at 5% of the bid amount or the official bank check, cashier’s check, certificate of deposit or U. S. Postal Money Order in the amount given in the “Notice to Contractors”, payable to the Treasurer of the State of Maine and accompanying this bid, shall be forfeited, as liquidated damages, if in case this bid is accepted, and the undersigned shall fail to abide by the terms and conditions of the offer and fail to furnish satisfactory insurance and Contract bonds under the conditions stipulated in the Specifications within 15 days of notice of intent to award the contract.

Third: To begin the Work on the date specified in the Engineer’s “Notice to Commence Work” as stated in Section 107.2 of the Standard Specifications Revision of December 2002 and complete the Work within the time limits given in the Special Provisions of this Contract.

Fourth: The Contractor will be bound to the Disadvantaged Business Enterprise (DBE) Requirements contained in the attached Notice (Additional Instructions to Bidders) and submit a completed Contractor’s Disadvantaged Business Enterprise Utilization Plan by 4:30pm on the day of bid opening to the Contracts Engineer.

Fifth: That this offer shall remain open for 30 calendar days after the date of opening of bids.

Sixth: The Bidder hereby certifies, to the best of its knowledge and belief that: the Bidder has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of competitive bidding in connection with its bid, and its subsequent contract with the Department.

IN WITNESS WHEREOF, the Contractor, for itself, its successors and assigns, hereby execute two duplicate originals of this Agreement and thereby binds itself to all covenants, terms, and obligations contained in the Contract Documents.

CONTRACTOR

Date

(Signature of Legally Authorized Representative
of the Contractor)

Witness

(Name and Title Printed)

G. Award.

Your offer is hereby accepted.
documents referenced herein.

This award consummates the Contract, and the

MAINE DEPARTMENT OF TRANSPORTATION

Date

By: David A. Cole, Commissioner

Witness

BOND # _____

CONTRACT PERFORMANCE BOND
(Surety Company Form)

KNOW ALL MEN BY THESE PRESENTS: That _____
_____ **and the State of** _____, as principal,
and _____,
a corporation duly organized under the laws of the State of _____ and having a
usual place of business _____,
as Surety, are held and firmly bound unto the Treasurer of the State of Maine in the sum
of _____ **and 00/100 Dollars (\$** _____ **)**,
to be paid said Treasurer of the State of Maine or his successors in office, for which
payment well and truly to be made, Principal and Surety bind themselves, their heirs,
executors and administrators, successors and assigns, jointly and severally by these
presents.

The condition of this obligation is such that if the Principal designated as Contractor in
the Contract to construct Project Number _____ in the Municipality of
_____ promptly and faithfully performs the Contract, then this
obligation shall be null and void; otherwise it shall remain in full force and effect.

The Surety hereby waives notice of any alteration or extension of time made by the State
of Maine.

Signed and sealed this _____ day of _____, 20....

WITNESSES:

Signature.....
Print Name Legibly

Signature
Print Name Legibly

SURETY ADDRESS:

.....
.....
.....

TELEPHONE.....

SIGNATURES:

CONTRACTOR:

Print Name Legibly
SURETY:

Print Name Legibly

NAME OF LOCAL AGENCY:

ADDRESS

.....
.....

BOND # _____

CONTRACT PAYMENT BOND
(Surety Company Form)

KNOW ALL MEN BY THESE PRESENTS: That _____
_____ **and the State of** _____, as principal,
and _____
a corporation duly organized under the laws of the State of _____ and having a
usual place of business in _____,
as Surety, are held and firmly bound unto the Treasurer of the State of Maine for the use
and benefit of claimants as herein below defined, in the sum of
_____ **and 00/100 Dollars (\$** _____ **)**
for the payment whereof Principal and Surety bind themselves, their heirs, executors and
administrators, successors and assigns, jointly and severally by these presents.

The condition of this obligation is such that if the Principal designated as Contractor in
the Contract to construct Project Number _____ in the Municipality of
_____ promptly satisfies all claims and demands incurred for all
labor and material, used or required by him in connection with the work contemplated by
said Contract, and fully reimburses the obligee for all outlay and expense which the
obligee may incur in making good any default of said Principal, then this obligation shall
be null and void; otherwise it shall remain in full force and effect.

A claimant is defined as one having a direct contract with the Principal or with a
Subcontractor of the Principal for labor, material or both, used or reasonably required for
use in the performance of the contract.

Signed and sealed this _____ day of _____, 20 .. .

WITNESS:

SIGNATURES:

CONTRACTOR:

Signature.....

Print Name Legibly

SURETY:

Signature.....

Print Name Legibly

SURETY ADDRESS:

NAME OF LOCAL AGENCY:

ADDRESS

.....

TELEPHONE

GENERAL DECISION ME030003 06/13/03 ME3
General Decision Number ME030003

Superseded General Decision No. ME020003

State: Maine

Construction Type:
HIGHWAY

County(ies):
ANDROSCOGGIN CUMBERLAND

Highway Construction Projects Excluding Major Bridging
(for example: bascule, suspension and spandrel arch
bridges; those bridging waters presently navigating or
to be navigable; and those involving marine construction
in any degree); tunnels, building structures in rest area
projects and railroad construction.

Modification Number Publication Date
0 06/13/2003

COUNTY(ies):
ANDROSCOGGIN CUMBERLAND

SUME4025A 10/24/2000

	Rates	Fringes
CARPENTERS	11.30	1.95
ELECTRICIANS	17.90	2.30
LABORERS		
Flaggers	6.00	
Landscape	7.99	.72
Unskilled	8.69	1.08
POWER EQUIPMENT OPERATORS		
Backhoes	12.39	2.00
Bulldozers	11.13	1.94
Excavators	11.24	1.31
Loaders	11.19	1.82
Rollers	10.16	1.56
TRUCK DRIVERS		
Dump	9.02	1.39
Two axle	9.08	1.28

WELDERS - Receive rate prescribed for craft performing operation
to which welding is incidental.

Unlisted classifications needed for work not included within
the scope of the classifications listed may be added after
award only as provided in the labor standards contract clauses
(29 CFR 5.5(a)(1)(ii)).

In the listing above, the "SU" designation means that rates
listed under that identifier do not reflect collectively

bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U. S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U. S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION

SPECIAL PROVISION
SECTION 103.3 - POST-BID QUALIFICATIONS
(Statement of Bidder's Qualifications)

As part of the submitted Bid, each Bidder shall demonstrate to the satisfaction of the Department the experience of the firm and/or subcontractor who will be rehabilitating the streambanks and installing the plantings specified in the Contract. Written documentation of such experience shall be provided with the Bid to the Department. The Bidder shall furnish a list of its recent experience constructing wetland mitigation or environmental restoration projects, including a) the name of the owner for whom the work was performed, b) the name and telephone number of a contact person, c) a description of the work performed, d) the total construction cost of each project, and e) the names(s) of the Bidder's subcontractor's, project superintendent(s) and foremen who had direct supervisory responsibility for the projects listed. Said experience shall include, as a minimum, at least one (1) mitigation, environmental restoration, or landscape construction contract within the last ten (10) years that required working in sensitive shoreland areas and furnishing and installing native woody plant material, and was of equal or greater complexity as the work required by this Contract.

A statement of the bidder's qualifications that includes 1) the Bidder's experience record in constructing the type of improvements embraced in the Contract as described above, and 2) the personnel and equipment available for the work contemplated, shall be included in the proposal.

The Department shall have the right to take such steps, as it deems necessary, to determine the ability of the Bidder to perform its obligations under the Contract. The bidder shall furnish the Department all such information and data for this purpose, as it may request. The Department reserves the right to reject any bid where an investigation of the available evidence or information does not satisfy the Department that the bidder is qualified to properly carry out the terms of the Contract.

SPECIAL PROVISIONS
SECTION 104
Utilities

MEETING

A Preconstruction Utility Conference, as defined in Subsection 104.4.6 of the Standard Specifications **{is}** required.

GENERAL INFORMATION

These Special Provisions outline the arrangements that have been made by the Department for utility and/or railroad work to be undertaken in conjunction with this project. The following list identifies all known utilities or railroads having facilities presently located within the limits of this project or intending to install facilities during project construction

Overview:

Utility/Railroad	Aerial	Underground	Railroad
Boston and Maine Corporation and the Springfield Terminal Railway Company			X

Temporary Railroad adjustments are anticipated.

Unless otherwise specified, any underground utility facilities shown on the project plans represent approximate locations gathered from available information. The Department cannot certify the level of accuracy of this data. Underground facilities indicated on the topographic sheets (plan views) have been collected from historical records and/or on-site designations provided by the respective utility companies. Underground facilities indicated on the cross-sections have been carried over from the plan view data and may also include further approximations of the elevations (depths) based upon straight-line interpolation from the nearest manholes, gate valves, or test pits.

All adjustments are to be made by the respective utility/railroad unless otherwise specified herein.

All clearing and tree removal in areas where utilities are involved must be completed before the utilities are able to relocate their facilities.

Utility Specific Issues:

RAILROAD

Boston and Maine Corporation Springfield Terminal Railway Company

Access to the project will be via a private Railroad crossing. The crossing must be upgraded to accommodated construction equipment . All work involving the crossing shall be performed by the contractor per the attached SPECIFICATIONS FOR PRIVATE, TEMPORARY OR FARM CROSSINGS on Railroad Right-Of-Way. Marked EXHIBIT “C” and per the SPECIAL PROVISION PROTECTION OF RAILROAD TRAFFIC AND STRUCTURES (PRTS).Also attached.

NOTE: (1) All work plans on or around Railroad Right of Way must be submitted and approved by the above Railroad prior to commencement of work.

(2) All work on or around the Railroad will be incidental to the Contract

The Railroad contact is: George S.Thayer,Chief Design Engineer,
Boston and Maine Corporation
Iron Horse Park
North Billerica,Mass. 01862
Telephone # (978) 663-6973

SPECIAL SPECIFICATION

PROTECTION OF RAILROAD TRAFFIC AND STRUCTURES

INSTRUCTIONS: These instructions are not a part of the Special Specifications.

The Special Specification for the Protection of Railroad Traffic and Structures is, by Department policy, to be made a part of the highway contract documents for any project where work is to be done by the Contractor on or adjacent to the right of way of a railroad.

The Railroad is to complete the shaded areas on the form, the Department is to complete all other information. Where the information requested does not adequately describe the situation, that portion of the specification is to be revised as necessary. The limits of work to be established by the Department under "Inspection" will be no nearer the track than the limits specified by the Railroad.

This PRTS form was revised in December 2000. The modifications were primarily minor format changes, however, there was one clarification of content: wherever the word "days" was previously used, the term "calendar days" is now used. There were no other changes to the content of the document.

**SPECIAL PROVISION
PROTECTION OF RAILROAD TRAFFIC AND STRUCTURES**

1. GENERAL REQUIREMENTS

Part of the work required by the Contract will be performed within a railroad right of way and/or adjacent to the tracks, telephone, telegraph, signal and electric supply lines of a railroad or railroads. The Contractor agrees to perform all such work in compliance with all of the terms of this Special Provision and all safety rules, regulations, or standards applicable to the Railroad. The Contractor shall be fully responsible for all damages arising from his failure to comply with the requirements of this Special Provision. The Contractor shall be deemed to have included all costs in the unit prices of the Schedule of Prices and the Proposal.

2. AMOUNT OF RAILROAD WORK

The estimated amount of work to be done within 15.24 Meters (50 feet) of the track of the **The Boston and Maine Corporation and the Springfield Terminal Railway Company** is Less than **10%** of the contract.

3. NUMBER OF TRAINS AND TRAIN SPEED

The Contractor is notified that a maximum speed of (**40** mph) will be considered as prevailing for the operation of trains of the Railroad at this project and that the approximate number of trains per day at this project is **6 Freight 0 Passenger**

4. PRIORITY OF RAILROAD OPERATIONS

The train movements of the Railroad, and its lessees, and licensees shall have absolute priority over the performance of the Construction Project within the railroad right of way. The Contractor hereby agrees that the hours and times of work within the Railroad right of way must be coordinated through the Railroad and that such hours and times are subject to change without prior notice to the Contractor, unless other prior arrangements have been made through the Railroad.

5. AUTHORITY OF RAILROAD TO STOP WORK

If the Contractor fails to comply with the safety terms of this Special Provision, or if the Chief Engineer of the Railroad determines that the Contractor is using unsafe practices that threaten the safety of rail traffic, rail workers, or the general public, the Railroad shall have the right to immediately order the Contractor to cease work and vacate the Railroad's property. The Railroad agrees to confirm any cessation of work in writing by delivering to the Department's Construction Manager a completed Stop Work Order form attached as Exhibit A within 24 hours of giving any such order.

6. ENTRY UPON RAILROAD PROPERTY

The Railroad hereby agrees to permit the Contractor, together with their subcontractors, suppliers, consultants and engineers (the "Contractor"), to enter upon the Railroad property for the purpose of performing the Construction Project, PROVIDED THAT the Contractor complies with all of the terms of this Special Provision and all safety requirements and directions of the Chief Engineer of the Railroad, or his authorized representative (the "Railroad's Chief Engineer").

7. NOTICE REQUIRED BEFORE ENTRY

The Contractor shall give written notice to the Railroad's Chief Engineer at least 7 calendar day(s) in advance of the time it proposes to do work within the limits of the Railroad right-of-way or perform operations that may create a Hazard as specified by this Special Provision. The Contractor shall give such notice regardless of whether the work may also be within the limits of a public highway.

8. HAZARDS

The Contractor shall assess to its own satisfaction hazards which may be caused by its operations. At a minimum, the Contractor agrees that the following shall constitute Hazards.

An operating track shall be considered fouled and subject to hazard when any object is brought nearer than (15 feet) to the gauge line of the near rail of the track.

A signal line or communication line shall be considered fouled and subject to hazard when any object is brought nearer than (4 feet) to any wire or cable.

An electric supply line shall be considered fouled and subject to hazard when any object is brought nearer than (10 feet) to any wire of the line.

Cranes, trucks, power shovels or any other equipment shall be considered as fouling and subjecting to hazard a track, signal line, communication or electric supply line when working in such position that failure of equipment, with or without load, could foul the track, signal line, communication or electric supply line.

Railroad operation will be considered subject to hazard when explosives are used in the vicinity of railroad premises, or during the driving or pulling of sheeting for any footing adjacent to a track, or when erecting structural steel adjacent to a track, or when performing work under, across or adjacent to a track, or when operations involve, swinging booms or chutes that could in any way come nearer then (15 feet) to the gauge line of the near rail of the track, or when erection or removal of staging, false work or forms fouls a track or wire line.

None of the operations specified as a Hazard above shall be carried on during the approach or passing of a train or without permission from the Railroad's Chief Engineer and the presence of a railroad inspector/flagman, unless other prior arrangements have been made through the Railroad.

9. MINIMUM CLEARANCES

During the construction of staging, false work or forms, the Contractor shall at all times maintain a minimum vertical clearance of (22'-6" feet) above the top of high rail and a minimum side clearance of (10' feet) from the gauge line of the near rail where track is tangent. Additional side clearance must be maintained where track is on a curve.

10. WORK PLAN SUBMITTAL AND APPROVAL

The Contractor shall submit in writing to the Railroad's Chief Engineer or duly authorized representative, and the Department's Railroad Property Manager or his appointed representative, at least 14 calendar day(s) in advance of the start of the project, an outline of his plan for work within the Railroad right of way including contemplated method(s) of construction. This plan must meet with the approval of the Railroad's Chief Engineer and the Department's Railroad Property Manager in every respect. If the Contractor contemplates the use of "on the track equipment", it should so state and obtain from the Railroad the conditions pertaining to such operations. All Railroad costs included in this operation will be borne by the Contractor. In a like manner, any of the Contractor's equipment or material on cars for this project shall be handled in conformance with existing traffic rules with all costs borne by the Contractor.

Prior to submitting his Proposal, the Contractor shall have ascertained from the Railroad and from the Department's Railroad Property Manager or his appointed representative, all information relating to its requirements and regulations and all costs in connection with compliance thereto.

11. EXCAVATIONS

Before excavation for footings adjacent to tracks and/or within the Railroad's right-of-way may commence, whether or not also within the limits of a public highway, plans and calculations for such excavations, prepared by a Professional Engineer authorized to practice in Maine, shall be submitted to the Railroad's Chief Engineer for review and approval. Unless other prior arrangements have been made, the Railroad's Chief Engineer shall have 2 week(s) to perform such review and approval and issue a written permission to proceed with the excavation. No excavation shall proceed without such permission.

At a minimum, excavations must utilize proper bracing, shoring, sheeting or other support as determined by the Railroad's Chief Engineer, to support the tracks with railroad traffic. Open excavation shall be suitably planked over when construction operations are not in progress, the location of any wires, conduits, pipes, cables or other railroad facilities below the surface of the ground. Damage to any such facilities caused by the failure of the Contractor to ascertain the location of such facilities or by failure to use due care to avoid injury to such facilities shall be at the expense of the Contractor.

12. EQUIPMENT

Equipment of the Contractor shall be in such condition so as to prevent failure that would cause delay in the operation of trains or damage to railroad facilities. Equipment shall not be placed or put in operation adjacent to a track without first obtaining permission of the Railroad. The Railroad agrees that such permission shall not be unreasonably withheld.

13. RAILROAD SERVICES - GENERALLY

When work is to be performed within the Railroad's right-of-way, the Railroad shall provide the services, equipment and materials provided in this Special Provision including, but not limited to, engineering, flagging, inspection, signal protection and/or relocation, and restoration or replacement of the Railroad's track structure of ballast. Further, if the Railroad's Chief Engineer determines that the Contractor's operations do not comply with all of the safety requirements of this Special Provision and all safety requirements and directions of said Chief Engineer, the Railroad will employ the necessary qualified employees to protect its trains and other facilities. The Contractor shall pay to the Railroad the cost for performing all Railroad Services unless said costs are to be paid by the Department as specified in this Special Provision.

14. INSPECTION / FLAGGING

The Railroad shall furnish and assign all inspectors / flaggers for general inspection purposes of general protection of railroad property and operations during construction as the Railroad's Chief Engineer determines are necessary to preserve safety.

(a) Responsibility for Cost. The Department will bear the cost of flagging or inspection (including travel time) or any combination thereof up to 6 man days of said flagging or inspection. If, in the opinion of the Railroad's Chief Engineer, further services of a flagger or inspector will be required due to the operations of the Contractor, the services will be furnished and the cost thereof (salary, expenses, insurance, taxes and vacation allowance, etc.) shall be paid to the Railroad by the Department, and will be recovered by the Department from the Contractor.

Town: **New Gloucester**
Project/PIN: **NO.NH-3517(90)E**
6/11/03

(b) Terms. The minimum hours per day for the Railroad employees engaged in inspection flagging services shall be eight (8) hours. Time at rates for straight time, overtime or for deadheading starts in accordance with established practices in effect in the territory in which the project is located. Information as to these practices should be obtained from the Railroad's Chief Engineer.

The Contractor shall notify the Railroad's Chief Engineer and the Chief Engineer of the Department in writing 3 calendar day(s) before beginning, resuming or suspending work within (25 feet) of the track, so that an inspector may be provided or removed in accordance with the requirements of this Special Provision. An inspector may be removed upon 3 calendar day(s) notice. Failure to give notice of intent to suspend work shall be cause of charge to the Contractor the cost of inspection during the period when work is suspended.

(c) Estimated Cost. The following is an estimate of the cost per day of inspection/flagging necessary for this project. The rates shown include all overhead charges, travel time, deadheading and personal expenses.

Date of estimate 6-2-03.

Estimated daily rate for four (4) consecutive hours Monday-Friday (straight time): \$133.55

Estimated daily rate for four (4) consecutive hours Saturday, Sunday, Holiday (overtime):
\$200.32

Estimated rate for hours worked in excess of eight (8) hours in any one day: \$50.08

Rates charged will be those in effect at the time of the performing the inspection/ flagging which may be different than the rates used at the date of the Estimate. The Railroad agrees to notify the Department if rates used to calculate the above estimates change before the date of bids are received for this Contract.

(d) Definitions.

Man day (M.D.) - eight (8) consecutive hours or any portion thereof.

Overtime - Each additional hour or fraction thereof consecutive to and beyond the standard man day will count as 3/16 of a man day.

Standard Man day - Eight (8) consecutive hour, Monday - Friday between the hours of 07:00 a.m. to 15:30 p.m. unless otherwise noted and agreed to by all parties. (less lunch ½ hour 12:00-12:30)

Travel Time - Time required by flagger and/or inspector to commute between his or her point of headquarters to the project site. This time shall not be charged used in determining available man days.

15. OTHER CONTRACTOR RESPONSIBILITIES

The restoring and resurfacing of tracks, if disturbed due to Contractor's operations, shall be at the expense of the Contractor.

Any other changes made or services furnished by the Railroad as a result of the Contractor will be at the Contractor's expense.

16. EXTRA-CONTRACT SERVICES

Temporary and permanent changes of tracks and telephone, signal and electric supply lines made necessary by or to clear the permanent work of the Contractor as shown on the construction plans and included in the Railroad force account as collectable from the State will be made or caused to be made by the Railroad without expense to the Contractor.

17. INDEMNIFICATION

Where work is being performed over, under, across or adjacent to Railroad premises, the Contractor shall defend, indemnify and save harmless the Railroad and the Maine Department of Transportation from and against any and all loss, cost, damage, claims, suits, demands, or liability for damages for personal injury including death and for damage to property, which may arise from or out of the operations conducted under his contract, occurring by reason of any act or omission of the Contractor, his agents, servants or employees, or by reason of any act or omission of any subcontractor, his agents, servants or employees.

18. INSURANCE

In addition to any other forms of insurance or bonds required under the terms of the Contract, the Contractor will be required to procure and maintain, at its sole cost and expense, the following insurance coverages naming the Railroad as an insured.

(a) Railroad Protective Liability Insurance with limits not less than **\$2M** per single occurrence and **\$6M** per aggregate total occurrences.

(b) Comprehensive General Liability Insurance protecting against liability from bodily injury or property damage arising out of the Construction Project with limits of not less than **\$2M** per single occurrence and **\$6M** per aggregate total occurrences.

Town: **New Gloucester**
Project/PIN: **NO.NH-3517(90)E**
6/11/03

(c) Workers Compensation and Occupational Disease Insurance, as required by law.

(d) Automobile Liability Insurance covering all motor vehicles used about or in connection with the Construction Project.

If any part of the work is sublet, these insurance coverages shall be provided by or on behalf of the subcontractors to cover their operations

Each policy shall carry an endorsement covering the “save harmless” clause in favor of the Railroad and the Maine Department of Transportation, as set forth in the paragraph, “Responsibility for Damage Claims”.

If blasting is to be done in the vicinity of the Railroad, the insurance policies shall include such coverage.

The policies shall be in force before any work is done on the project and shall remain in effect until all work required to be performed under the terms of the contract is satisfactorily completed as evidenced by the formal acceptance by the State and the Railroad.

Before any work is done on the project, the Department of Transportation and the Railroad's Chief Engineer shall be furnished certificates of each policy. Further, the original policy of the Comprehensive General Liability Insurance and the Railroad Protective Liability Insurance shall be furnished to the Railroad's Chief Engineer and a duplicate shall be furnished to the Department of Transportation.

The policy or policies of the Railroad’s protective public liability and property damage liability shall be written by a Company authorized to do business in the State of Maine, and shall be signed by the President and Secretary of the Insurance Company and shall be countersigned by an authorized representative of the Company.

19. ROADWAY WORKER SAFETY REGULATION

Notice to all Contractors/Subcontractors and individuals must be aware of the Federal Roadway Worker Safety Regulation, CFR 49, Part 214(c). They may be required to comply with this regulation. Any requirements for them to comply will be discussed at the pre-construction utility meeting.

New Gloucester
NO.NH-3517(90)E
6/11/03

EXHIBIT A
ORIGINAL TO CONTRACTOR

MDOT/RAILROAD STOP WORK ORDER

Section A - Contractor	Town
	DOT Railroad Project #
Railroad Name	Location
	Notice #
DESCRIPTION OF SAFETY HAZARD/REASON FOR ORDER	
Standard Violated	RAC (Risk Assessment Code)
	N/R
Railroad Official (Flagger/Inspector) Name	Date
Signature	
SECTION B - ACTION TAKEN:	

cc: MDOT - R.E. or Inspector
MDOT - Utility Section
MDOT - Construction Division
Railroad - Chief Engineer

1. Risk Assessment. Each identified/validated hazard shall be assigned a Risk Assessment Code (RAC) by the Safety Office. The RAC represents the degree of risk associated with the deficiency and combines the elements of hazard severity and mishap probability. The RAC is derived as follows:

a. Hazard Severity. The hazard severity is an assessment of the worst potential consequence: Defined by degree of injury, occupational illness, or property damage, which is likely to occur as a result of a deficiency. Hazard severity categories shall be assigned by roman numeral according to the following criteria.

- (1) Category I - Catastrophic: The hazard may cause death or loss of a facility.
- (2) Category II - Critical: May cause severe injury, severe occupational illness, or major property damage.
- (3) Category III - Marginal: May cause minor injury, minor occupational illness, or minor property damage.
- (4) Category IV - Negligible: Probably would not affect personnel safety or health, but is nevertheless in violation of a NAVOSH standard.

b. Mishap Probability. The mishap probability is the probability that a hazard will result in a mishap, based on an assessment of such factors as location, exposure in terms of cycles or hours of operation, and affected population. Mishap probability shall be assigned an Arabic letter according to the following criteria:

- (1) Sub-category A - Likely to occur immediately or within a short period of time.
- (2) Sub-category B - Probably will occur in time.
- (3) Sub-category C - May occur in time.
- (4) Sub-category D - Unlikely to occur.

c. Risk Assessment Code. The RAC is an expression of risk which combines the elements of hazard severity and mishap probability. Using the matrix shown below, the RAC is expressed as a single Arabic number that can be used to help determine hazard abatement priorities.

	Mishap Probability					RAC
		A	B	C	D	1 - Critical
Hazard Severity	I	1	1	2	3	2 - Serious
	II	1	2	3	4	3 - Moderate
	III	2	3	4	5	4 - Minor
	IV	3	4	5	5	5 - Negligible

March 8, 1984

APPENDIX A

DEPARTMENT OF TRANSPORTATION

EFFECTUATION OF TITLE VI OF THE CIVIL RIGHTS ACT OF 1964

During the performance of this contract, the Contractor, for itself, its assignees and successors in interest (hereinafter referred to as the "Contractor"), agrees as follows:

- (1) Compliance with Regulations: The Contractor will comply with the Regulations of the Department of Transportation relative to nondiscrimination in federally-assisted programs of the Department of Transportation (Title 15, Code of Federal Regulations, Part 8, hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this contract.
- (2) Nondiscrimination: The Contractor, with regard to the work performed by it after award and prior to completion of the contract work, will not discriminate on the ground of race, color or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The Contractor will not participate either directly or indirectly in the discrimination prohibited by Section 8.4 of the Regulations, including employment practices when the contract covers a program set forth in Appendix A-II of the Regulations.
- (3) Solicitations for Subcontracts. Including Procurements of Materials and Equipment: In all solicitations either by competitive bidding or negotiation made by the Contractor for work to be performed under a subcontract, including procurements of materials or equipment, each potential subcontractor or supplier shall be notified by the Contractor of the Contractor's obligations under this contract and the Regulations relative to nondiscrimination on the ground of race, color or national origin.
- (4) Information and Reports: The Contractor will provide all information and reports required by the Regulations or orders and instructions issued pursuant thereto, and will permit access to its books, records, accounts, other sources of information and its facilities as may be determined by the Bureau of Project Development or the Federal Highway Administration to be pertinent to ascertain compliance with such Regulations, orders, and instruction. Where any information required of a Contractor is in the exclusive possession of another who fails or refuses to furnish this information, the Contractor shall so certify to the Bureau of Project Development or the Federal Highway Administration as appropriate, and shall set forth what efforts it has made to obtain the information.

OVER

May 3, 1974

APPENDIX B

DEPARTMENT OF TRANSPORTATION

EFFECTUATION OF EXECUTIVE ORDER OF THE GOVERNOR, NO. 24 FY 73-74,
"CODE OF FAIR PRACTICES AND AFFIRMATIVE ACTION" DATED MARCH 20,
1974.

EXTRACT FROM DEPARTMENT OF PERSONNEL, EXECUTIVE DEPARTMENT,
STATE OF MAINE, "GUIDELINES FOR IMPLEMENTATION OF EXECUTIVE
ORDER" DATED MARCH 20, 1974.

During the performance of this contract, the Contractor agrees as follows:

1. The Contractor will not discriminate against any employee or applicant for employment because of race, color, religious creed, sex, national origin, ancestry, age, or physical handicap, unless related to a bona fide occupational qualification. Such action shall include, but not be limited to the following: employment, upgrading, demotions, transfers, recruitment or recruitment advertising; layoffs; or termination's; rates of pay or other forms of compensations; and selection for training including apprenticeship.
2. The Contractor will, in all solicitations, or advertising for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religious creed, sex, national origin, ancestry, age, or physical handicap.
3. The Contractor will send to each labor union or representative of the workers with which he has a collective or bargaining agreement, or other contract or understanding, whereby he is furnished with labor for the performances of his contract, a notice, to be provided by the contracting department or agency, advising the said labor union or workers' representative of the Contractor's commitment under this section and shall post copies of the notice in conspicuous places available to employees and to applicants for employment.
4. The Contractor will cause the foregoing provisions to be inserted in any subcontracts for any work covered by this agreement so that such provisions will be binding upon each subcontractor.

+
EXHIBIT “C”

SPECIFICATIONS FOR PRIVATE, TEMPORARY
OR FARM CROSSINGS ON
RAILROAD RIGHT-OF-WAY

The wood plank crossing surface shall be formed by installing planks or timbers as individual pieces over the entire crossing area guided by the following specifications.

Crossing timbers shall be rough sawn untreated hemlock, spruce or fir. The top of the timbers, when in place, shall be at the same elevation as the top of the rails, or in the case of a super elevated track, the timbers shall be placed on a plane even with a line from the top of rail to top of rail. Wood timbers in a crossing shall be full depth from top of rail to top of tie in order to eliminate the use of shims. Timbers shall not be less than four (4) inches thick and where used, shims shall not be less than 1.625 inches thick.

The timbers shall be placed in such a manner as to cover and protect the existing railroad ties. See Attachment “A”. The extreme top end edges of the timbers shall be beveled to reduce the hazard of being struck by railroad traffic.

Flangeway openings on the gauge side of the running rail shall be three point twenty-five (3.25) inches wide; flangeway openings on the field side of the running rail shall be three (3) inches wide.

The in-place timbers in a temporary or farm crossing shall be secured to the crossties.

The crossing approaches shall be constructed in line with the following specifications:

Materials placed in the crossing approaches out ten feet from the end of the ties shall be crushed rock, processed stone, washed gravel, or other material approved by the railroad. The approach grade out twenty (20) feet from the near rail shall be level. The remaining approach shall be constructed so as to direct surface water away from the railroad bed. Culverts shall be installed if considered necessary by the railroad.

Appropriate signing, as per Attachment “B” shall be installed on both approaches approximately twenty-five (25) feet from the track.

Clearing may be deemed necessary by the railroad in order to maintain a clear view of the track 900 feet in both directions from a point twenty-five (25) feet from the track at the crossing (greater distance may be required, depending on train and vehicle speeds).

All materials used in the crossing shall meet the requirements specified in Section 700 of the State of Maine Department of Transportation Standard Specifications, Highway and Bridges.

CROSSING MAINTENANCE

Maintenance procedures shall be performed by the LICENSEE in accordance with the following specifications:

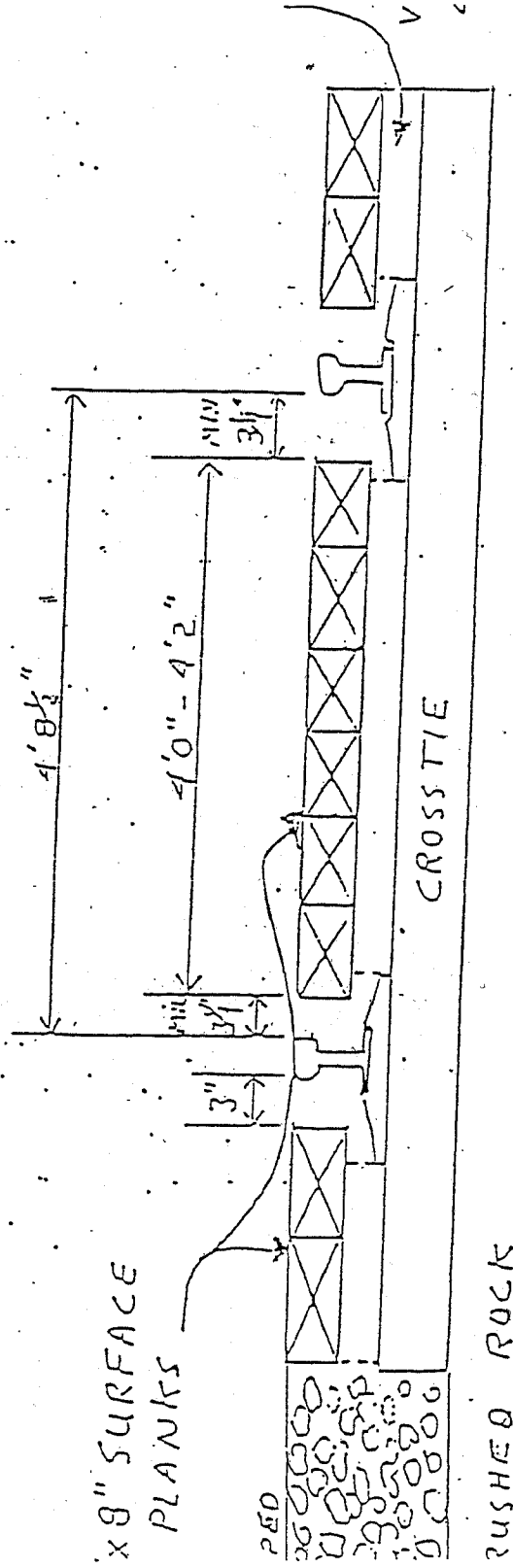
Crossing planks shall be in good repair and shall be replaced on either end on an as needed basis or at the direction of the railroad.

Flangeways on the gauge side of the track shall be kept clear of debris at all times.

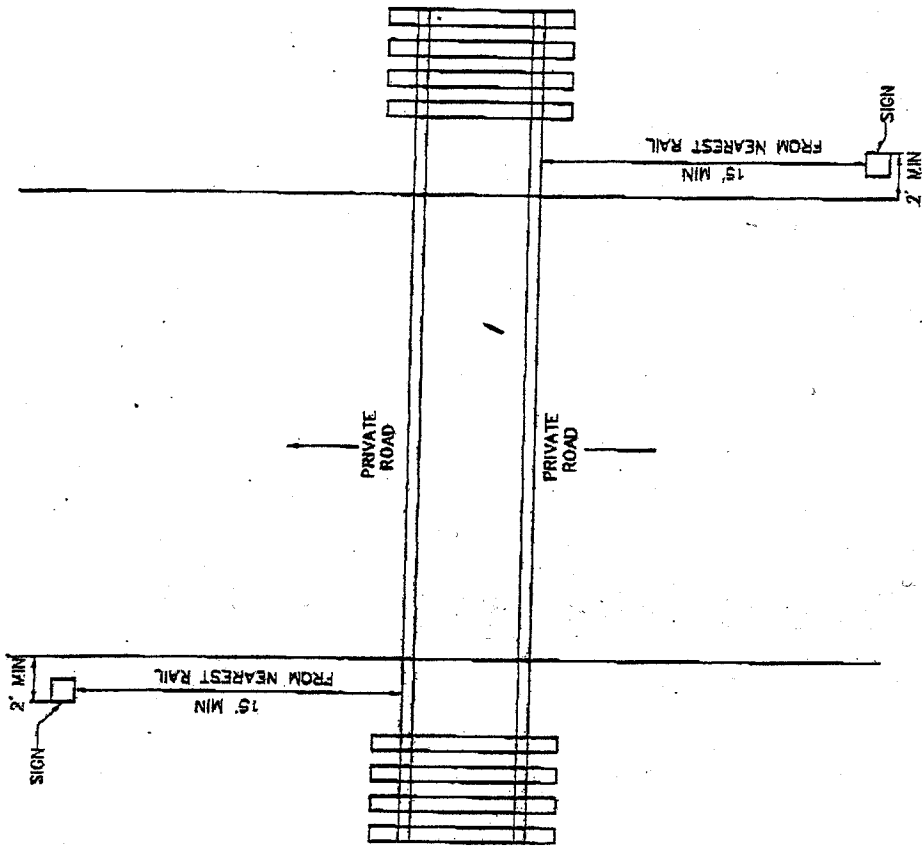
All signs shall be maintained in clear view.

All costs associated with the above maintenance activities shall be the contractor's responsibility. Maintenance work within 15 feet of the centerline of track requires railroad flag protection.

TYPICAL WOOD PLANK CROSSING



FULL DEPTH TIMBERS MAY BE SUBSTITUTED FOR ABOVE DESIGN. NOTCHES REQUIRED FOR TIE PLATES



STOP SIGN AND RAILROAD WARNING DISC SIGN ARE TO CONFORM TO THE REQUIREMENTS OF THE DECEMBER 2000 EDITION OF THE U.S. DEPT. OF TRANS., FHWA, "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES"

STOP SIGN

RED, RETROREFLECTIVE SHEETING, ENGINEERING GRADE WITH LETTERS AND BORDER MOUNTED ON 0.080" THICK ALUMINUM (6081-T6)

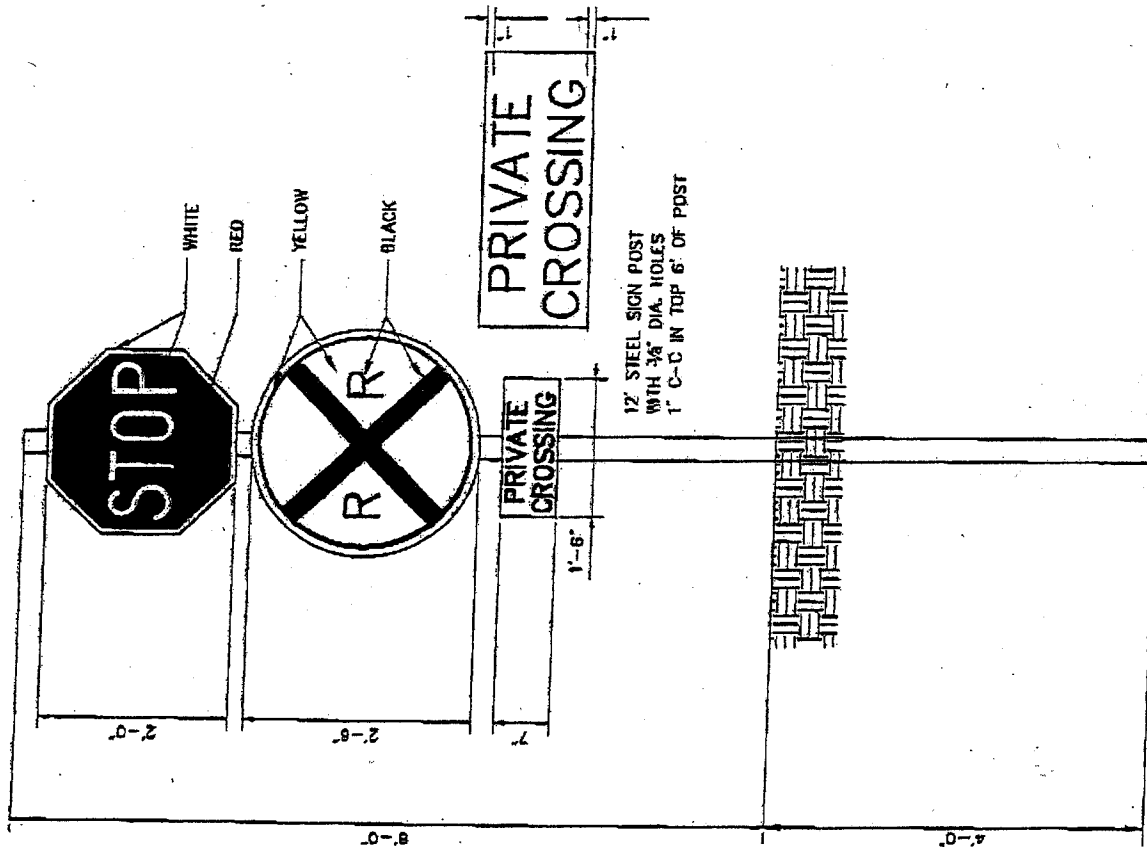
WARNING DISC

YELLOW RETROREFLECTIVE SHEETING, ENGINEERING GRADE WITH BLACK LETTERS, "X" AND BORDER MOUNTED ON 0.080" THICK ALUMINUM (6081-T6)

PRIVATE CROSSING SIGN

PAINTED BLACK LETTERS (1/4" WIDE, 2" HIGH ON A WHITE PAINTED BACKGROUND ON 0.080" THICK ALUMINUM (6081-T6)

EACH SIGN TO HAVE TWO 3/8" DIA. HOLES PRE-DRILLED (1" MIN. FROM THE TOP AND 1" MIN. FROM THE BOTTOM OF SIGN; ON VERTICAL CENTERLINE OF SIGN



NORTHERN NEW ENGLAND PASSENGER RAIL AUTHORITY (NNEPRA)

SIGNS FOR PRIVATE GRADE CROSSINGS
NEW HAMPSHIRE AND MAINE
(NOT TO SCALE)

SPECIAL PROVISION
SECTION 105 – GENERAL SCOPE OF WORK
(Environmental Requirements)

Instream work is allowed from June 1 to October 1. Instream work shall not be allowed between the dates of October 2 and May 31.

Stream Name(s): Royal River

Special Conditions: Appropriate erosion and sediment controls shall be installed and maintained in accordance with Special Provision Section 656.

Instream work consists of any activity conducted below normal high water mark.

- All activities below normal high water (including placement and removal of cofferdams) are prohibited during the instream work window restriction.
- Operation of wheeled or tracked equipment in water is prohibited at all times. Equipment operating on the shore may reach into the water with a bucket or similar extension in accordance with Special Provision Section 656.
- No construction activity, whether temporary or permanent, is allowed that completely blocks a river, stream, or brook without providing downstream flow.

The Contractor shall abide by all permits and conditions.

SPECIAL PROVISION
SECTION 105 - GENERAL SCOPE OF WORK
(Limitation of Operations)

Equipment Limitations Except as provided by the Special Provisions, the operation, parking, or storage of mechanized equipment, vehicles or materials within 10 feet of the top edge of the streambank of the Royal River (see the vehicle/equipment limit line shown on the plans) is prohibited. Vehicles and equipment for excavating, grading, stockpiling, hauling, and placing soil and other materials during all operations at the site shall be confined to the established access routes, the existing farm road, designated excavation and planting bed areas, and streambank rehabilitation areas, shown on the plans unless otherwise approved by the Resident. The Contractor shall limit the operation of vehicles and equipment across the narrow land bridge shown on the plans. Additional temporary access roads will not be permitted. Damage to existing vegetation or ground surfaces (e.g., rutting or soil compaction) shall be restored by the Contractor, to the satisfaction of the Resident, at no additional expense.

Mechanized equipment and vehicles used for work under this Contract shall not exceed the following limits, unless otherwise approved by the Resident:

<u>Equipment</u>	<u>Description/Maximum Size</u>
Truck	dual wheel, single axle dump or flatbed, with maximum GVWR of 15,000 lbs
Excavator	tracked, maximum 16,000 lb weight class, low ground pressure (maximum 2 psi)
Other	pneumatic-tired utility tractors; 55 hp

These limitations are necessary (1) because of the unimproved condition of the private railroad crossing over tracks owned by Guilford Rail, (2) to minimize the potential for bank failure due to excessive surcharging near the streambank, and (3) to minimize soil compaction and damage to existing vegetation.

SPECIAL PROVISION
SECTION 107 - TIME
(Limitation of Operations)

107.3. Allowable Work Times

107.3.4 Seasonal Work Restrictions. The following is added to this subsection:

Unless authorized by the Resident, the Contractor shall not begin construction operations in the streambank rehabilitation or floodplain areas, other than mowing, until July 14, 2003, which is the estimated date of the beginning of the seasonal low water period.

SPECIAL PROVISION
SECTION 107 - TIME
(Contract Time and Contract Completion Dates)

107.1.1 Contract Completion Dates

The following activities at the Royal River mitigation site must be completed by the dates specified:

Completion by: August 29, 2003 - Basin excavation/grading; streambank rehabilitation earthwork, coir fiber roll and blanket installation; streambank planting; and gate installation.

Completion by: September 26, 2003 - Planting in the floodplain restoration area, all permanent seeding and mulching of disturbed or exposed soils, and overall site clean-up.

Completion by: September 23, 2005 - Installation of all replacement plantings and completion of all requirements for Plant Establishment in streambank rehabilitation and floodplain restoration areas.

107.8 Supplemental Liquidated Damages. Supplemental Liquidated Damages will be assessed to the Contractor in the amount of five hundred dollars (\$500.00) per day for each calendar day that the above stated work remains incomplete. This assessment of Supplemental Liquidated Damages shall be in addition to the liquidated damages per working day, as specified in Subsection 107.7.2 of the Standard Specifications.

SPECIAL PROVISION
SECTION 107 - TIME
(Contract Time and Contract Completion Date)

The specified contract completion date is September 23, 2005.

SPECIAL PROVISION
CORRECTIONS, ADDITIONS AND REVISIONS
Standard Specifications - Revision of December 2002

SECTION 101
CONTRACT INTERPRETATION

101.2 Definitions - Closeout Documentation

Replace the sentence “A letter stating the amount..... DBE goals.” with “DBE Goal Attainment Verification Form”

SECTION 102
DELIVERY OF BIDS
(Location and Time)

102.7.1 Location and Time

Add the following sentence “As a minimum, the Bidder will submit a Bid Package consisting of the Notice to Contractors, the completed Acknowledgement of Bid Amendments & Submission of Bid Bond Validation Number form, the completed Schedule of Items, 2 copies of the completed Agreement, Offer, & Award form, a Bid Bond or Bid Guarantee, and any other Certifications or Bid Requirements listed in the Bid Book.”

SECTION 106
QUALITY

106.6 Acceptance Add the following to paragraph 1 of A: “This includes Sections 401 - Hot Mix Asphalt, 402 - Pavement Smoothness, and 502 - Structural Concrete - Method A - Air Content.”

Add the following to the beginning of paragraph 3 of A: “For pay factors based on Quality Level Analysis, and”

SECTION 107
TIME

107.3.1 General Add the following: “If a Holiday occurs on a Sunday, the following Monday shall be considered a Holiday. Sunday or Holiday work must be approved by the Department, except that the Contractor may work on Martin Luther King Day, President’s Day, Patriot’s Day, the Friday after Thanksgiving, and Columbus Day without the Department’s approval.”

SECTION 402 PAVEMENT SMOOTHNESS

Add the following:

“Projects to have their pavement smoothness analyzed in accordance with this Specification will be so noted in Special Provision 403 - Bituminous Box.”

“402.02 Lot Size Lot size for smoothness will be 1000 lane-meters [3000 lane-feet]. A subplot will consist of 20 lane-meters [50 lane-feet]. Partial lots will be included in the previous lot if less than one-half the size of a normal lot. If greater than one-half the normal lot size, it will be tested as a separate lot.”

SECTION 502 STRUCTURAL CONCRETE

502.0502 Quality Assurance Method A - Rejection by Resident Change the first sentence to read: “For an individual subplot with test results failing to meet the criteria in Table #1, or if the calculated pay factor for Air Content is less than 0.80.....”

502.0503 Quality Assurance Method B - Rejection by Resident Change the first sentence to read: “For material represented by a verification test with test results failing to meet the criteria in Table #1, the Department will.....”

502.0505 Resolution of Disputed Acceptance Test Results Combine the second and third sentence to read: “Circumstances may arise, however, where the Department may”

SECTION 604 MANHOLES, INLETS, AND CATCH BASINS

604.02 Materials Add the following:

“Tops and Traps	712.07
Corrugated Metal Units	712.08
Catch Basin and Manhole Steps	712.09”

SECTION 615 LOAM

618.02 Materials Make the following change:

Organic Content

Percent by Volume

Humus "5% - 10%", as determined by
Ignition Test

SECTION 618 SEEDING

618.01 Description Change the first sentence to read as follows: "This work shall consist of furnishing and applying seed"

Remove "and cellulose fiber mulch" from 618.01(a).

618.03 Rates of Application In 618.03(a), remove the last sentence and replace with the following: "These rates shall apply to Seeding Method 2, 3, and Crown Vetch."

618.09 Construction Method In 618.09(a) 1, sentence two, replace "100 mm [4 in]" with "25 mm [1 in] (Method 1 areas) and 50 mm [2 in] (Method 2 areas)"

SECTION 620 GEOTEXTILES

620.03 Placement Section (c)

Title: Replace "Non-woven" in title with "Erosion Control".

First Paragraph: Replace first word "Non-woven" with "Woven monofilament".

Second Paragraph: Replace second word "Non-woven" with "Erosion Control".

620.07 Shipment, Storage, Protection and Repair of Fabric Section (a)

Replace the third sentence with the following: "Damaged geotextiles, as identified by the Resident, shall be repaired immediately."

620.09 Basis of Payment

Pay Item 620.58: Replace "Non-woven" with "Erosion Control"

Pay Item 620.59: Replace "Non-woven" with "Erosion Control"

SECTION 712 MISCELLANEOUS HIGHWAY MATERIALS

Add the following:

“712.07 Tops, and Traps These metal units shall conform to the plan dimensions and to the following specification requirements for the designated materials.

Gray iron castings shall conform to the requirements of AASHTO M105, Class 30, unless otherwise designated.

Carbon steel castings shall conform to the requirements of AASHTO M103/M103M. Grade shall be 450-240 [65-35] unless otherwise designated.

Structural steel shall conform to the requirements of AASHTO M183/M183M or ASTM A283/A283M, Grade B or better. Galvanizing, where specified for these units, shall conform to the requirements of AASHTO M111.

712.08 Corrugated Metal Units The units shall conform to plan dimensions and the metal to AASHTO M36/M36M. Bituminous coating, when specified, shall conform to AASHTO M190 Type A.

712.09 Catch Basin and Manhole Steps Steps for catch basins and for manholes shall conform to ASTM C478M [ASTM C478], Section 13 for either of the following material:

- (a) Aluminum steps-ASTM B221M, [ASTM B211] Alloy 6061-T6 or 6005-T5.
- (b) Reinforced plastic steps Steel reinforcing bar with injection molded plastic coating copolymer polypropylene. Polypropylene shall conform to ASTM D 4101.

712.23 Flashing Lights Flashing Lights shall be power operated or battery operated as specified.

- (a) Power operated flashing lights shall consist of housing, adapters, lamps, sockets, reflectors, lens, hoods and other necessary equipment designed to give clearly visible signal indications within an angle of at least 45 degrees and from 3 to 90 m [10 to 300 ft] under all light and atmospheric conditions.

Two circuit flasher controllers with a two-circuit filter capable of providing alternate flashing operations at the rate of not less than 50 nor more than 60 flashes per minute shall be provided.

The lamps shall be 650 lumens, 120 volt traffic signal lamps with sockets constructed to properly focus and hold the lamp firmly in position.

The housing shall have a rotatable sun visor not less than 175 mm [7 in] in length designed to shield the lens.

Reflectors shall be of such design that light from a properly focused lamp will reflect the light rays parallel. Reflectors shall have a maximum diameter at the point of contact with the lens of approximately 200 mm [8 in].

The lens shall consist of a round one-piece convex amber material which, when mounted, shall have a visible diameter of approximately 200 mm [8 in]. They shall distribute light and not diffuse it. The distribution of the light shall be asymmetrical in a downward direction. The light distribution of the lens shall not be uniform, but shall consist of a small high intensity portion with narrow distribution for long distance throw and a larger low intensity portion with wide distribution for short distance throw. Lenses shall be marked to indicate the top and bottom of the lens.

(b) Battery operated flashing lights shall be self-illuminated by an electric lamp behind the lens. These lights shall also be externally illuminated by reflex-reflective elements built into the lens to enable it to be seen by reflex-reflection of the light from the headlights of oncoming traffic. The batteries must be entirely enclosed in a case. A locking device must secure the case. The light shall have a flash rate of not less than 50 nor more than 60 flashes per minute from minus 30 °C [minus 20 °F] to plus 65 °C [plus 150 °F]. The light shall have an on time of not less than 10 percent of the flash cycle. The light beam projected upon a surface perpendicular to the axis of the light beam shall produce a lighted rectangular projection whose minimum horizontal dimension shall be 5 degrees each side of the horizontal axis. The effective intensity shall not have an initial value greater than 15.0 candelas or drop below 4.0 candelas during the first 336 hours of continuous flashing. The illuminated lens shall appear to be uniformly bright over its entire illuminated surface when viewed from any point within an angle of 9 degrees each side of the vertical axis and 5 degrees each side of the horizontal axis. The lens shall not be less than 175 mm [7 in] in diameter including a reflex-reflector ring of 13 mm [½ in] minimum width around the periphery. The lens shall be yellow in color and have a minimum relative luminous transmittance of 0.440 with a luminance of 2854° Kelvin. The lens shall be one-piece construction. The lens material shall be plastic and meet the luminous transmission requirements of this specification. The case containing the batteries and circuitry shall be constructed of a material capable of withstanding abuse equal to or greater than 1.21 mm thick steel [No. 18 U.S. Standard Gage Steel]. The housing and the lens frame, if of metal shall be properly cleaned, degreased and pretreated to promote adhesion. It shall be given one or more coats of enamel which, when dry shall completely obscure the metal. The enamel coating shall be of such quality that when the coated case is struck a light blow with a sharp tool, the paint will not chip or crack and if scratched with a knife

will not powder. The case shall be so constructed and closed as to exclude moisture that would affect the proper operation of light. The case shall have a weep hole to allow the escape of moisture from condensation. Photoelectric controls, if provided, shall keep the light operating whenever the ambient light falls below 215 lx [20 foot candles]. Each light shall be plainly marked as to the manufacturer's name and model number.

If required by the Resident, certification as to conformance to these specifications shall be furnished based on results of tests made by an independent testing laboratory. All lights are subject to random inspection and testing. All necessary random samples shall be provided to the Resident upon request without cost to the Department. All such samples shall be returned to the Contractor upon completion of the tests.

712.32 Copper Tubing Copper tubing and fittings shall conform to the requirements of ASTM B88M Type A [ASTM B88, Type K] or better.

712.33 Non-metallic Pipe, Flexible Non-metallic pipe and pipe fittings shall be acceptable flexible pipe manufactured from virgin polyethylene polymer suitable for transmitting liquids intended for human or animal consumption.

712.34 Non-metallic Pipe, Rigid Non-metallic pipe shall be Schedule 40 polyvinylchloride (PVC) that meets the requirement of ASTM D1785. Fittings shall be of the same material.

712.341 Metallic Pipe Metallic pipe shall be ANSI, Standard B36.10, Schedule 40 steel pipe conforming to the requirements of ASTM A53 Types E or S, Grade B. End plates shall be steel conforming to ASTM A36/A36M.

Both the sleeve and end plates shall be hot dip galvanized. Pipe sleeve splices shall be welded splices with full penetration weld before galvanizing.

712.35 Epoxy Resin Epoxy resin for grouting or sealing shall consist of a mineral filled thixotropic, flexible epoxy resin having a pot life of approximately one hour at 10°C [50°F]. The grout shall be an approved product suitable for cementing steel dowels into the preformed holes of curb inlets and adjacent curbing. The sealant shall be an approved product, light gray in color and suitable for coating the surface.

712.36 Bituminous Curb The asphalt cement for bituminous curb shall be of the grade required for the wearing course, or shall be Viscosity Grade AC-20 meeting the current requirements of Subsection 702.01 Asphalt Cement. The aggregate shall conform to the requirements of Subsection 703.07. The coarse aggregate portion retained on the 2.36 mm [No. 8] sieve may be either crushed rock or crushed gravel.

The mineral constituents of the bituminous mixture shall be sized and graded and combined in a composite blend that will produce a stable durable curbing with an acceptable texture.

Bituminous material for curb shall meet the requirements of Section 403 - Hot Bituminous Pavement.

712.37 Precast Concrete Slab Portland cement concrete for precast slabs shall meet the requirements of Section 502 - Structural Concrete, Class A.

The slabs shall be precast to the dimension shown on the plans and cross section and in accordance with the Standard Detail plans for Concrete Sidewalk Slab. The surface shall be finished with a float finish in accordance with Subsection 502.14(c). Lift devices of sufficient strength to hold the slab while suspended from cables shall be cast into the top or back of the slab.

712.38 Stone Slab Stone slabs shall be of granite from an acceptable source, hard, durable, predominantly gray in color, free from seams which impair the structural integrity and be of smooth splitting character. Natural color variations characteristic of the deposit will be permitted. Exposed surfaces shall be free from drill holes or indications of drill holes. The granite slabs in any one section of backslope must be all the same finish.

The granite slabs shall be scabble dressed or sawed to an approximately true plane having no projections or depressions over 13 mm [$\frac{1}{2}$ in] under a 600 mm [2 ft] straightedge or over 25 mm [1 in] under a 1200 mm [4 ft] straightedge. The arris at the intersection of the top surface and exposed front face shall be pitched so that the arris line is uniform throughout the length of the installed slabs. The sides shall be square to the exposed face unless the slabs are to be set on a radius or other special condition which requires that the joints be cut to fit, but in any case shall be so finished that when the stones are placed side by side no space more than 20 mm [$\frac{3}{4}$ in] shall show in the joint for the full exposed height.

Liftpin holes in all sides will be allowed except on the exposed face.

SECTION 717 ROADSIDE IMPROVEMENT MATERIAL

717.05 Mulch Binder. Change the third sentence to read as follows:

“Paper fiber mulch may be used as a binder at the rate of 2.3 kg/unit [5 lb/unit].”

SPECIAL PROVISION
SECTION 203 - EXCAVATION AND EMBANKMENT
(Mitigation Excavation)

203.01 Description This work shall consist of removing, hauling, placing, spreading, and salvaging and backfilling, if required, soil material encountered during the excavation and reshaping of shallow wetland basins in accordance with the specifications and in reasonably close conformity with the lines, grades, proposed contours, planting bed boundaries and typical cross sections shown on the plans or established.

203.04 General Mitigation excavation shall conform to Subsection 203.04 of the Standard Specifications. The approximate locations and limits of mitigation excavation are shown on the plans.

Erosion Control Temporary erosion and sedimentation control measures shall be installed and maintained in accordance with the requirements of Special Provision Section 656 - Temporary Soil Erosion and Water Pollution Control.

Equipment Constraints The operation of motorized equipment shall conform to the limitations outlined in the Special Provisions, Section 105 and the vehicle/equipment limits shown on the plans. The operation of equipment for excavating, grading, stockpiling, hauling, and placing soil material during mitigation excavation operations shall be limited to the existing farm access road, and designated excavation and planting bed areas, unless otherwise approved by the Resident. The Contractor shall limit crossings of the narrow land bridge to reach the wetland basin within the large meander to the equipment required to excavate, place and spread soil.

Layout The Contractor shall layout the locations and limits of mitigation excavation for review and approval by the Resident. A Wetland Specialist will be available to answer questions in regard to the layout.

Mitigation Excavation and Grading The shallow wetland basins shall be excavated to the limits and desired finished depths as shown on the plans or as directed. The basins shall have finished side slopes no steeper than 3:1 (horizontal:vertical). The basins shall be graded relatively smooth, and shall be compacted and smeared to form a restrictive layer that limits vertical drainage or percolation by surface water.

When excavating in areas of coarser textured soils (based on observations of one or more shallow test pits dug by the Contractor in each basin), the Resident may direct the Contractor to salvage the upper 6 to 8 inches of topsoil, excavate the basins below the depth shown on the plans, and backfill with topsoil. This procedure may require additional excavation to achieve the desired finish grades and basin depths. Topsoil placed within the basins shall be compacted and smeared.

Excavated basins shall be mulched with straw following finish grading in accordance with Special Provision Section 656 - Temporary Soil Erosion and Water Pollution Control.

Excess suitable material taken from excavation shall be used as backfill for streambank rehabilitation (see Special Provision Section 614), except that if the volume of suitable excavated material exceeds the backfill requirements, the excess shall be placed on top of the existing sod around the basins as shown on the plans, or in nearby planting beds as directed, and spread in a layer less than 8 inches thick. Exposed soils shall be mulched in accordance with Special Provision Section 656 – Temporary Soil Erosion and Water Pollution Control. Unless otherwise authorized, no excavated material shall be hauled off site.

203.18 Method of Measurement. Except as otherwise provided, mitigation excavation will be measured by the number of cubic yards measured in its original position by cross-sectional elevations of the area excavated or by other acceptable methods. Volumes will be computed by the average end area method or by other methods generally recognized as conforming to good engineering practice.

As an alternative to in-place measurement, the Contractor and the Resident may agree in writing that the quantity of mitigation excavation for payment will be that shown in the Schedule of Items in the contract. If such an agreement is reached, no further measuring and computing of quantities will be required and the contract quantity will be considered final and no adjustments will be made except when necessary to excavate below the depth shown on the plans.

203.19 Basis of Payment. The accepted quantity of mitigation excavation will be paid for at the contract unit price per cubic yard. Payment will be full compensation for: excavating, loading, hauling, placing and spreading all materials; providing, establishing and maintaining layout stakes; finish grading and detailed machine work; providing specialized equipment and mats; and for all labor, materials and incidentals necessary to complete the work.

When it is necessary to salvage existing topsoil and excavate below the depth shown on the plans, payment for such excavation will be made at the contract unit price per cubic yard. Temporary stockpiling and replacement of salvaged topsoil will not be paid for directly but will be considered incidental to the work.

The cost of rototilling excavated soils spread on the plant beds will be incidental to the applicable planting items.

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
203.232 Mitigation Excavation	Cubic Yard

SPECIAL PROVISION
SECTION 607 - FENCES
(Drive Gateway 16 Foot - Metal)

607.01 Description The following is added:

This work shall consist of furnishing and installing drive gateways at the locations shown on the Plans or as directed.

607.02 Materials The following is added:

Materials shall conform to and meet the nominal pipe diameters as specified in the Special Details on the Plans. Pipe for drive gateways shall be of standard-weight, 2-inch diameter steel, primed and painted with a rust-inhibiting primer and paint after fabrication. Gates shall be constructed and installed according to Special Details on the Plans, and supplied with a heavy chain to permit securing of the drive gateway. Locks will be furnished by others.

607.03 General The following is added:

The drive gateway shall be of welded construction. Metal posts shall be set in solid concrete and installed plumb in drilled or dug holes. The concrete anchors shall be of the dimensions shown on the Special Details. The vertical posts shall be filled with concrete after installation to prevent water collection.

Temporary guys shall be installed to hold the posts in position until the concrete has set. Unless otherwise permitted, no material shall be installed on posts or strain placed on guys until 48 hours after the concrete has set.

607.06 Method of Measurement The drive gateways will be measured by the number of individual gateways furnished and installed as required and accepted.

607.07 Basis of Payment The following is added:

The accepted quantity of drive gateways will be paid for at the contract unit price per each gateway complete in place. Payment will be full compensation for furnishing and assembling all materials, for excavating and backfilling holes, and for all labor, materials, equipment and incidentals necessary to finish the work.

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
607.15 Drive Gateway 16 Foot - Metal	Each

SPECIAL PROVISION
SECTION 613 - EROSION CONTROL BLANKETS
(Extended Use Erosion Control Blanket - Coir)

613.01 Description This work will consist of furnishing labor, equipment, and materials for the installation of extended use erosion control blanket – coir on graded streambank rehabilitation areas and the coir fiber roll trench (Pay Item 614.10), as shown on the plans or as directed.

613.02 Materials

Extended Use Erosion Control Blanket Erosion control blanket used to cover regraded streambank shall be a woven matting made from high-strength, 100% white coir fiber. This fabric shall be 100 percent biodegradable and have no stitched seams, and shall conform to the following:

- (a) Longevity (estimated average): 4 to 8 years
- (b) Thickness (min.): 0.30 inches
- (c) Open Area (max.): 50%
- (d) Mass per unit area (min.): 20 oz/sq. yd
- (e) Recommended Water Velocity (min.): 12 ft/sec
- (f) Recommended Shear Stress (min.): 4.5 ft/sec
- (g) Roll Width x Length (min.): 13.1 ft x 83 ft (4m x 25m)

Ground Anchors Anchors used to secure the extended use erosion control blanket shall be U-shaped metal staples, plain steel (not galvanized), 11 gauge, minimum 8 inches in length.

Possible sources of extended use erosion control blankets and staples:

Nedia Enterprises, Inc.
22187 Vantage Point Place
Ashburn, VA 20148
1-888-725-6999

Rolanka International, Inc.
155 Andrew Drive
Stockbridge, GA 30281
1-800-760-3215

613.03 Site Preparation Prior to installing the blanket, the Contractor shall: (1) prepare the streambank in accordance with Special Provision Section 614 - Streambank Rehabilitation, and prepare the surface in accordance with subsection 613.03 of the Standard Specifications; and (2) excavate the trench for the coir fiber roll as described in Special Provision Section 614 – Coir Fiber Roll.

613.04 Seeding Prior to installing the blanket, the Contractor shall seed the prepared slope with Special Seed Mix: Royal River #1, conforming to the general

requirements of Subsection 717.03. Special Seed Mix: Royal River #1 shall be applied at the rate of 4 lbs per unit (175+/- lbs/acre).

Agricultural ground limestone shall be applied to the prepared slope prior to seeding in accordance with the requirements of Subsections 618.03 and 618.05 of the Standard Specifications. Fertilizer is not required.

613.05 Installation The blanket shall be installed length-wise, with the roll aligned parallel to the river in the direction of flow. The number of vertical seams (i.e., those running at a right angle to the river flow) shall be kept to a minimum. The lower edge of the blanket shall be placed into the prepared trench and anchored prior to installing the coir fiber roll in accordance with Special Provision Section 614 – Coir Fiber Roll and the typical details. After installing and securing the coir fiber roll over the lower edge of the blanket, the remaining portion of the blanket shall be secured to the streambank as shown on the plans or as directed, with care taken not to stretch or tear the blanket during installation. The upper margin of the blanket along the top of bank and the upstream and downstream ends shall be secured in backfilled trenches with ground anchors (metal staples) as shown on the typical details. Upstream sections of blanket shall overlap downstream sections. Anchor spacing shall be as shown on the plans.

613.06 Maintenance The Contractor shall maintain the installed blanket and the seeded area, making necessary adjustments and repairing any tears and anchor pull-outs until Final Acceptance. As part of the blanket maintenance, the Contractor shall repair any damage to the blanket or prepared streambank, such as sloughing or rill erosion, caused by runoff from the adjacent field. The Contractor will not be responsible for repairing erosion and damage to the blanket or bank resulting from the effects of river flooding.

613.08 Method of Measurement The quantity of extended use erosion control blanket – coir will be measured by the square yard, based on length and width of the installed blankets measured on the ground surface. Measurement will not be made for overlaps, patches, and repairs of damaged blanket unless additional overlap width is required by the Resident, in which case measurement will be made for the added overlap area.

613.09 Basis of Payment Extended use erosion control blanket – coir will be paid for at the contract unit price per square yard complete in place and accepted. Such payment shall be full compensation for furnishing and installing the blanket, all required surface preparation, furnishing and spreading seed and limestone under blanket, and for all required maintenance and repair.

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
613.329 Extended Use Erosion Control Blanket – Coir	Square Yard

SPECIAL PROVISION
SECTION 614
(Coir Fiber Roll)

614.01 Description. This work shall consist of furnishing and installing coir fiber rolls as shown on the Plans or as otherwise directed.

614.02 Materials

Coir Fiber Roll. Coir Fiber Roll shall consist of 100% mattress quality coir fiber enclosed by a high-strength outer coir twine netting with a 2" x 2" mesh with hand-knotted junctions, and shall conform to the following:

- (a) Size - rolls shall be 20 inches in diameter and 10 feet in length;
- (b) Density - maximum 7lbs/cubic foot;
- (c) Weight - 14 lbs/linear foot;
- (d) Minimum diameter of coir twine for netting - 3/8 inch;
- (e) Minimum average breaking strength of netting - 60 lbs.

No substitutions in Coir Fiber Roll diameter will be allowed. No substitutions regarding other Coir Fiber Roll specifications will be allowed without prior approval from the Resident.

Possible sources:

Nedia Enterprises, Inc.
22187 Vantage Point Place
Ashburn, VA 20148
1-888-725-6999

Rolanka International, Inc.
155 Andrew Drive
Stockbridge, GA 30281
1-800-760-3215

Pierson Nurseries
24 Buzzell Road
Biddeford, Maine 04005
207-499-2994

Duckbill Anchors. Duckbill anchors shall be used to secure the Coir Fiber Roll to the substrate as shown on the Plans. The duckbill anchors shall be the multipurpose type, and shall conform to the following specifications:

- (a) Anchor length and width - 6 inches by 1.3 inches
- (b) Anchor weight - 14 oz
- (c) Cable (wire rope) length and size - 42 inches by ¼ inch
- (d) Anchor holding strength (normal soil) - 3,000 lbs
- (e) Wire rope breaking strength - 7,000 lbs

Possible source of Duckbill Anchors:

Foresight Products, LLC
6430 East 49th Drive
Commerce City, CO 80022
1-800-325-5360

Wire Rope and Hardware. Additional wire rope shall be used to join pairs of duckbill anchors as shown on the Plans. Such wire rope shall conform to the same size (i.e., ¼ inch diameter) and strength specifications as the duckbill cables. Wire rope for joining duckbill anchors shall be secured using gripples or an approved similar wire rope connector. Gripples shall be sized to fit ¼ inch wire rope.

Possible source of gripples:

Gripple Inc,
313 Oswalt Ave
Batavia, IL 60510
1-630-406-0600

614.03 Layout. The Contractor shall mark locations and elevations of the Coir Fiber Roll along the streambank, for approval by the Resident prior to installation. Approved labeled stakes and skilled labor for this purpose shall be provided by the Contractor. A Wetland Specialist will be available to assist the Contractor determine the appropriate location and elevation of the Coir Fiber Roll.

614.04 Site Preparation and Installation. The streambank areas to receive the Coir Fiber Roll shall be prepared as shown on the plans and as directed. The Contractor shall grade and compact the soils on the bank in accordance with Special Provision Section 614 (Streambank Rehabilitation) prior to installing the Coir Fiber Roll. The Contractor shall dig a trench in the marked location to accept the Coir Fiber Roll as shown on the plans. The Coir Fiber Roll shall be placed in the trench on top of the lower edge of the specified extended-use erosion control blanket (Special Provision Section 613 – Erosion Control Blankets). The Coir Fiber Roll shall be secured to the streambank using duckbill anchors and wire rope as shown on the plans. Each roll segment shall be securely joined to the adjacent segment by tying the netting of the two ends together using heavy twine. The end of the most upstream segment of Coir Fiber Roll shall be curved and keyed into the slope. Riprap (Pay Item 610.08) shall be placed around the Coir Fiber Roll in this area to protect it from scour, as shown on the plans and as directed.

614.05 Time of Installation. The Contractor shall conduct this work during seasonal low-water conditions and in accordance with the completion dates and allowable work times in the Special Provisions Section 107 – Time.

614.06 Maintenance. The Contractor shall be responsible for maintenance, including re-anchoring and repair of the Coir Fiber Roll and all necessary slope repairs until Final Acceptance.

614.07 Method of Measurement. The quantity of Coir Fiber Roll will be measured by the number of linear feet of roll complete in place and accepted.

614.08 Basis of Payment. Coir Fiber Roll will be paid for at the contract unit price per linear foot. Such payment will be full compensation for furnishing, placing, joining and maintaining the coir rolls; all required layout, trenching and surface preparation; furnishing and placing all anchors and other hold-down devices, wire rope and hardware; and all labor, tools, materials, equipment, and other incidentals necessary to complete this work.

Riprap will be paid for separately under Item 610.08.

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
614.10 Coir Fiber Roll	Linear Foot

SPECIAL PROVISION
SECTION 614
(Streambank Rehabilitation)

614.01 Description This work shall consist of rehabilitating portions of existing streambank along the Royal River to address slumping and minor erosion problems by excavating, grading and compacting streambank soils, and fill material if necessary, in accordance with the Plans and as directed. As shown on the Plans, and as described in Special Provision Section 105 and below, there are limitations on equipment size and operation near the streambank.

614.03 Equipment Limitations In addition to the general equipment limitations contained in Special Provision Section 105, the following restrictions shall apply during streambank rehabilitation work: (1) mechanized equipment shall only operate from the top of bank, and in a manner that minimizes the potential to cause bank erosion or slumping; (2) equipment may operate closer than 10 feet to the top edge of the streambank as necessary to complete the specified work, but the Contractor shall closely monitor the potential for bank slumping or erosion due to equipment operation, and shall protect the streambank from damage; and (3) all other vehicles necessary to complete the work shall not travel or park closer than 10 feet from the top of the streambank, particularly on the narrow land bridge, unless authorized by the Resident.

614.04 Time of Construction The Contractor shall conduct this work only during seasonal low-water conditions and in accordance with the completion dates and allowable work times in Special Provision Section 107 - Time.

614.05 Layout The Contractor shall mark the upstream, downstream, and in-stream limits of streambank rehabilitation work for approval by the Resident prior to the start of work. A Wetland Specialist will be available to assist the Contractor in determining the vertical limit of work within the stream channel (i.e., the lowest elevation of grading). The Contractor shall use this limit to determine and mark the limit of work at the top of bank for approval by the Resident. Approved stakes and skilled labor for this purpose shall be provided by the Contractor.

614.06 Existing Streambank The existing streambank for streambank rehabilitation shall be excavated, graded and compacted to the slopes as shown on the cross-sections or as directed to provide a surface on which to place an extended use erosion control blanket. All sod and other unsuitable material shall be removed from the areas to be graded and placed on nearby planting beds as directed.

If necessary, suitable material excavated from the streambank or from the shallow wetland basins (see Special Provision Section 203) shall be placed and compacted to bring low areas along the streambank within the limits of streambank rehabilitation to the required grade. All material shall be compacted to the required density immediately after placement.

Surplus excavated material shall be placed on top of the existing sod in nearby planting beds as directed, and spread in a layer less than 8 inches thick. Exposed soils shall be mulched in accordance with Special Provision Section 656 – Temporary Soil Erosion and Water Pollution Control.

614.07 Compaction Material incorporated into the streambank shall be compacted to achieve a density of 80 to 85 percent of the standard Proctor maximum dry density. This level of compaction is designed to provide adequate stability performance, while allowing sufficient root penetration by planted shrubs. Field density tests will be made by the Department to the extent required by the Resident. The surface, compaction and stability shall be satisfactorily maintained until the extended use erosion control blanket (Pay Item 613.329) and the coir fiber roll (Pay Item 614.10) have been placed. The Contractor shall bear full responsibility for and make all necessary repairs to the graded streambank until the blanket and fiber roll have been placed and accepted. Repairs shall be considered incidental to the streambank rehabilitation item.

614.08 Surface Tolerance The completed surface of the graded streambank shall be shaped and maintained to provide a surface suitable for placement of the erosion control blanket.

614.09 Method of Measurement The quantity of streambank rehabilitation measured for payment will be measured by the number of square yards of graded streambank, measured along the slope, complete in place.

614.10 Basis of Payment The accepted quantity of streambank rehabilitation will be paid for at the contract unit price per square yard. Payment will be full compensation for: furnishing, establishing and maintaining layout stakes; excavating, grading, and compacting the designated streambank areas; all associated loading, hauling, and on-site placement and spreading of excess soil materials; detailed machine work and specialized equipment; and for all labor, materials and incidentals necessary to complete the work.

Payment for streambank rehabilitation will include excavation and fill areas.

Temporary stockpiling and replacement of excavated soils will not be paid for directly but will be considered incidental to the work.

Furnishing and placing seeding, lime and extended use erosion control blanket will be paid for under Pay Item 613.329 Extended Use Erosion Control Blanket – Coir.

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
614.20 Streambank Rehabilitation	Square Yard

SPECIAL PROVISION
SECTION 618 - SEEDING
(Applied Water - For Mitigation Plantings and Seeding)

618.101 Applied Water. The following sentence is added:

An abnormal drought shall be defined as three consecutive weeks without rain of more than one-half inch.

SPECIAL PROVISION
SECTION 618 - SEEDING
(Special Seed Mix: Royal River #1)

618.01 Description This work shall consist of furnishing labor, equipment and materials for preparing the soil and applying Special Seed Mix: Royal River #1 to exposed, rototilled soils within the floodplain planting bed areas following planting, as shown on the Plans or as directed. These seeding areas shall consist only of those portions of the rototilled beds that are not covered by plant mat mulching after planting, as described in Special Provision Section 621 – Landscaping (Floodplain Restoration Planting).

618.02 Materials The subsection is revised to add the following:

Special Seed Mix All seeding of exposed, rototilled soils of the floodplain planting group areas following planting shall be done with the Special Seed Mix: Royal River #1, specified below and shown on the Plans. Seed shall meet the germination and purity requirements in Subsection 717.03.

The Royal River #1 mix shall consist of seeds proportioned as follows:

Common Name	Botanical Name	% by Weight
Annual Rye Grass	<i>Lolium perenne</i>	50%
White Clover	<i>Trifolium repens</i>	25%
Redtop	<i>Agrostis gigantea</i>	25%

Possible Seed Sources:

Allen, Sterling, and Lothrop
191 U.S. Route One
Falmouth, ME 04105
(207) 781-4142

Fertilizer and Lime No fertilizer or other soil amendments will be required.

618.03 Rate of Application This entire subsection is revised to read:

The Royal River #1 seed mix shall be uniformly applied to all areas specified herein and on the Plans at the rate of 4.0 pounds per unit (+/- 175 pounds per acre). One unit is defined as 1,000 square feet.

618.05, 618.06 and 618.07 Applying Fertilizer and Sowing Seed These subsections are replaced with the following:

Seed shall be applied by hand cyclone seeder or similar means in accordance with Subsection 618.06 of the Standard Specifications, uniformly at the required rate. The hydraulic spray method will not be allowed. Immediately following application, the seed shall be raked lightly by hand to promote contact with bare soil.

618.08 Mulching This subsection is revised to read:

After seeding, the Contractor shall place straw mulch to cover the seeded areas (refer to Special Provision Section 619 - Special Mulch: Straw). The use of hay mulch is strictly prohibited.

618.09 Construction Method The entire subsection is deleted and replaced with the following:

Immediately prior to application of Special Seed Mix: Royal River #1, the top 2 inches of the soil shall be loosened by hand raking. On freshly graded areas, raking may be waived if the Resident determines that the soil surface is loose enough to provide bedding for the seed.

618.11 Method of Measurement The first paragraph is revised to read:

Areas seeded with Special Seed Mix: Royal River #1 will be measured by the area of seeded and mulched surface in units of 1,000 square feet. Measurements will be made parallel with the slope of the ground.

618.12 Basis of Payment The first paragraph is revised to read:

The accepted quantities of Special Seed Mix: Royal River #1 will be paid for at the contract unit price per unit or portions thereof complete in place and satisfactorily established. Payment shall constitute full payment for raking, furnishing and placing seed and straw mulch; for initial watering and clean up of seeded areas; and all labor, equipment, tools, and any other incidentals necessary to complete the work. The price shall also include any reseeding, watering, and maintenance necessary to meet the requirements of Section 618.10 of the Standard Specifications. No additional payment shall be made for multi-phase seeding.

Special Seed Mix: Royal River #1 applied under blanket in accordance with Special Provision, Section 613 Extended Use Erosion Control Blanket-Coir and to repair damage to existing vegetation and ground surfaces will not be paid for directly but will be considered incidental to the applicable contract item and no separate payment will be made.

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
618.143 Special Seed Mix: Royal River #1	Unit

SPECIAL PROVISION
SECTION 619 - MULCH
(Special Mulch - Straw)

619.01 Description. Replace Subsection 619.01 with the following:

This work shall consist of furnishing and applying straw for mulching excavated basins, seeded areas within the floodplain planting areas, and to repair damage to existing vegetation and ground surfaces. Straw mulch will not be required on areas seeded in accordance with Special Provision, Section 613 Extended Use Erosion Control Blanket–Coir).

619.02 Mulch. Straw mulch shall conform to standards set forth in Section 717.04. The use of hay mulch is strictly prohibited.

619.07 Basis of Payment. The accepted areas mulched with Special Mulch – Straw shall be incidental to Items 618.143 (Special Seed Mix: Royal River #1) and other applicable items.

SPECIAL PROVISION
SECTION 621 - LANDSCAPING
(Floodplain Restoration Planting)

621.0001 Description. This work shall consist of furnishing labor, equipment and materials for installing containerized trees and shrubs, plant mats and tree shelters within the floodplain planting zone at the Royal River restoration site. This section also includes rototilling certain planting areas (i.e., those planting beds with excavated soil spread on them), and the care and replacement of plant materials and seeded areas during the Plant Establishment Period, all in accordance with the specifications, planting plans and schedules, and the directions of the Resident.

621.0002 Plant Materials – General

Fertilizer. Fertilizer shall be added to the plant pits at the time that trees and shrubs are planted. Fertilizer shall be organic, water-soluble, slow-release dry tablets or packets, with a Nitrogen-Phosphorous-Potassium ratio of 16-6-8 or similar (note: a relatively low phosphorous content is desired due to the proximity of plantings to the river).

Suggested sources:

Right StartTM
Treessentials Company
60 E Plato Boulevard, Suite 130
Saint Paul, MN 55107
(800) 248-8239
www.treessentials.com

Nutri-PakTM
<http://www.treequest.com/> or www.nutripak.com

Mulch. Due to limitations to site access for mechanized equipment, plant mats shall be used for mulching of individual plants in place of organic mulch. Plant mats shall conform to the following minimum specifications:

Black or green polyethylene film, micro-perforated, with centers pre-cut in a cross-shape to allow installation over the plant, uv-stabilized to last at least 3 years. Size shall be 3-foot by 3-foot square.

Suggested sources:

Treessentials Company
60 E Plato Boulevard, Suite 130
Saint Paul, MN 55107
(800) 248-8239
www.treessentials.com

Arbortec Industries
12519 Pilgrim Street
RR# 7 Mission, BC, Canada V4S1C5
(800) 422-6221
<http://www.whiterockonline.com/arbortec.htm>

Tree Pro
3180 W. 250 N.
W. Lafayette, IN 47906
(800) 875-8071
<http://www.treepro.com/>

Biodegradable Stakes. Biodegradable stakes shall be used to secure the plant mats. The number and placement of such hold-down stakes shall be in accordance with the mat manufacture's recommendations. Biodegradable stakes shall be minimum 5 inches long, have a head of sufficient size to hold fabric securely, and have a rigid shaft with serrations for holding in the soil.

Suggested sources:
Bio-StakeTM
North American Green
14649 Highway 49 North
Evansville, IN 47725
(800) 772-2040
www.nagreen.com

Futerra StakeTM
Profile Products, LLC
350 Lake Cook Road
Buffalo Grove, IL 60089
(800) 366-1180
<http://www.conwedfibers.com/blankets/index/htm>

Wire Layout Flags. Wire flags for laying out containerized plantings shall be a minimum of 21 inches high. The Contractor shall supply a minimum of 8 different flag colors to allow for plant layout by species. Where additional marked flags are required

due to the variety of plant species, the Contractor shall develop a coding system and mark the necessary flags with indelible marker as directed by the Resident.

Tree Shelters The goal of the tree shelters is to reduce or eliminate damage or destruction caused small and large herbivores (e.g., beavers, mice and deer). Tree shelters shall be well-vented, and shall be the open, foldable type (e.g. Tree Pro™) as opposed to the rigid tube type. Tree shelters shall be 36 inches high, and shall be installed using 36–48-inch wooden stakes of the type that will resist rot for at least 5 years.

Suggested source:

Tree Pro

3180 W. 250 N.

W. Lafayette, IN 47906

(800) 875-8071

<http://www.treepro.com/>

Submittals Prior to delivery, the Contractor shall provide samples and specification sheets for plant mats, bio-degradable stakes, and tree shelters for approval by the Resident.

621.0006 Inspection Add the following:

Changes in quantities, size, kind or quality of plants from these plans and specifications will be permitted only with approval by the Resident. Any substitution requests shall be submitted in writing 21 days prior to planting. Substitutions that are not pre-approved will be rejected upon delivery to the site.

621.0018 General Construction Requirements The operation of motorized equipment during planting operations at the site shall be restricted to the established access routes, staging areas, and planting areas shown on the Plans or as directed by the Resident. The general operation of equipment at the site shall conform to the constraints outlined in Special Provision 105 and shown on the Plans. Mechanized equipment used to rototill plant beds and transport planting materials and equipment will be allowed to cross the narrow land bridge between the two channels as shown on the Plans, but the Contractor shall operate such equipment in a manner that minimizes the potential to cause streambank erosion or slumping at that location, and only those pieces of equipment necessary for this work shall be allowed to cross the narrow land bridge.

621.0018 Layout Add the following:

A Wetland Specialist will be on-site to assist the Resident in determining plant layout and monitoring plant installation. The Contractor shall assist the Resident in plant layout by developing a color-coded layout system, and by providing groups of flags as described above for use by the Wetland Specialist in layout. A skilled laborer shall be

provided by the Contractor to assist the Wetland Specialist in transporting, counting and installing layout stakes/markers, and for clean-up.

The trees and shrubs shall be installed in the planting group areas shown on the Plans. The Contractor shall be responsible for locating and staking the boundaries of the planting group areas. Some of the planting areas or portions thereof will be rototilled planting beds, while others will consist of mowed field areas with existing sod intact (see subsection 621.0019 below). The location of the planting group areas shall be considered approximate, but layout shall conform to the Plans in regard to the approximate size (square feet) so that the number of each species to be installed in each planting group area, and the approximate spacing between individual plants, will conform to the Plans.

The Resident or Wetland Specialist will use the color-coded flags provided by the Contractor to lay out the plant locations within the planting group areas. In general, plants will be laid out in random clusters, rather than straight rows, to mimic natural conditions. No *tree* species shall be planted within 10 feet of the top of the riverbank; only *shrub* species shall be installed in those areas (refer to Special Details on the Plans).

621.0019 Planting Pits and Beds Add the following:

General All plantings within the floodplain are considered Class B, to be planted in existing soil. Portions of some of the planting group areas will have excavated soil re-spread on them, and this soil shall be rototilled into the existing sod prior to planting, as described below. All other planting areas shall be prepared prior to planting by mowing existing vegetation close to the ground (see Special Provision Section 631 – Equipment Rental).

Rototilling Plant Beds Prior to planting, those planting group areas or portions thereof that have had excavated soil material spread on them shall be rototilled to mix the spread soil with the existing sod and topsoil. The Contractor shall rototill only those areas where soil has been previously spread, leaving other planting areas un-tilled. Rototilling shall break up the sod beneath, and thoroughly mix the spread soil with the existing soil to a depth of approximately 8–12 inches below the existing sod surface. A slightly uneven, rough surface is desired after rototilling is complete, rather than a smooth, even one.

Planting In preparation for planting, plant pits shall be dug through existing sod or the rototilled soil in accordance with this Section and the Plans, and as directed. Topsoil shall be removed from sod to be used as backfill. Sods or clods shall not be used as backfill, and shall be broken up and disposed away from the plants. Plants shall be installed as shown on the Special Details on the Plans, and in accordance with Standard Specification 621.0023 – Setting Plants. Prior to planting, plastic pots or containers shall be removed, avoiding damage to the root system. For plant material in biodegradable containers, the container shall be split prior to setting the plant with container. Prior to setting the plant in the pit, a maximum 1/4 depth of the root mass, measured from the bottom, shall be spread apart to promote new root growth after planting. Backfill soil

shall be added to the plant pit in 4–6-inch layers, with each layer firmly tamped. The backfill soil shall be carefully worked in amongst the roots. Air pockets shall be removed from around the root system, and root-to-soil contact shall be provided.

621.0020 Planting Seasons Substitute the following for the dates applicable to this project:

Potted & Container-Grown Plants:

Fall - August 15 to September 26

Spring - May 1 to June 15.

621.0025 Fertilizing Add the following:

Fertilizer tablets, if used, shall be added to the plant pits at the time of planting in accordance with this subsection of the Standard Specifications. If fertilizer packets are used, they shall be added to the plant pits in accordance with the fertilizer manufacturer's recommendations.

621.0026 Mulching This subsection is revised to read:

Plantings shall be installed after mowing the proposed planting areas. The Contractor shall install plant mats to cover the plant pits after plants have been installed, fertilized, backfilled, and watered. Where tree shelters are indicated, the Contractor shall install the tree shelter first, and then slide the plant mat over the shelter such that the bottom of the shelter tube is buried in the ground approximately 1–2 inches, and the mat is overlapping the tube at ground level (refer to Section 621.0032 below and to Special Detail on the Plans).

Plant mats shall be installed in accordance with the manufacturer's directions. Plant mats not installed correctly or found to be loose or damaged shall be removed and re-installed at any time during Plant Establishment period at the Contractor's own expense.

The Contractor shall take care to not damage plants when pulling plants through the pre-cut hole of the plant mat. Should a plant be too large for the hole, the Contractor shall cut the mat to accommodate the plant. Plant mats shall be secured to the ground with biodegradable stakes at each corner and at the center. Extra cut edges shall be overlapped and staked to the ground every 6-inches along the cut edge. Plant mats shall be aligned approximately parallel to planting rows or other plant mats in nearby groups.

As required by Special Provision Section 618 – Seeding, all areas of the rototilled planting beds not covered by plant mats shall be seeded with Special Seed Mix: Royal River #1 and covered with straw mulch after all plantings have been installed.

621.0027 Cultivation. The entire subsection is revised to read:

All plant pits (i.e. area covered by plant mats) shall be kept free of weeds and grass by the Contractor from the time the plants are installed until Final Acceptance. This shall be accomplished by manual weeding only. Cultivation or herbicides will not be allowed. There will be no payment for unsatisfactory work.

621.0032 Tree Shelter Installation. Tree shelters shall be installed on all hardwood trees as specified on the Plans and as directed. Tree shelters shall be installed as recommended by the manufacturer. Once installed, they shall prevent constriction and bark damage by fitting loosely around the stem or trunk; and shall allow for air circulation to buffer against high temperatures and excessive moisture. Wooden stakes for tree shelter anchoring shall be driven to a depth to sufficiently stabilize the tree shelter and protect it from wind buffeting. The Contractor shall use care when installing tree shelters so as not to damage the plants. Damaged plants shall be replaced at the Contractor's own expense. The Contractor shall be responsible for maintenance of the tree shelters throughout the Establishment Period.

621.0036 Establishment Period. The Establishment Period for plantings in this contract shall conform to Subsection 621.0036 of the Standard Specifications, and shall extend for a period of two years beginning at the end of planting. It shall also conform to the following:

The Contractor shall check, repair, and re-anchor the plant mats and tree shelters within the floodplain planting areas as needed throughout the Establishment Period. The Contractor shall also remove or control weed growth as necessary to preserve the installed plants in a healthy and vigorously-growing condition and to insure their successful establishment. Weeding shall include only hand-pulling or grass-whip methods; no herbicide use or cultivation shall be allowed. The Contractor shall keep records for all maintenance work performed, locations and quantities of plant losses and replacements, and diagnosis of unhealthy plant material. This record shall be submitted to the Resident in the monthly written reports in accordance with Subsection 621.0036 of the Standard Specifications.

621.0037 Method of Measurement. The quantity of plants to be measured for payment will be the number of individual plants furnished, planted, and mulched as required and accepted, excluding replacements. The quantity of tree shelters to be measured for payment will be the number of individual tree shelters furnished and installed as required and accepted.

621.0038 Basis of Payment. Add the following paragraphs:

Each item of planting in the floodplain restoration area will be paid for at the contract unit price for each accepted plant furnished and planted as indicated herein and on the Plans. All containerized plants to be installed in the floodplain restoration area are designated Group A. Payment shall constitute full compensation for furnishing and

installing plants, tree shelters, and plant mats, including rototilling of selected planting areas, preparing plant pits, fertilizing, planting, watering, pruning, and cleanup of planting areas; for all fertilizer, plant mat anchor stakes, and other necessary materials; all labor, equipment, and tools and any other incidentals necessary to complete the work.

Payment for maintenance of plant mats and tree shelters will be included in the item "Establishment Period".

At the time of final acceptance the Contractor shall provide a signed, valid and enforceable Warranty or Maintenance Bond in accordance with the requirements of Section 110.2.3 of the Standard Specifications. The Establishment Period item will be paid for at the contract unit price upon receipt of the Warranty or Maintenance Bond.

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
621.014 Evergreen Tree (18"-24") GP A	EA
621.225 Large Deciduous Tree (18"-24") GP A	EA
621.245 Large Deciduous Tree (2'-3') GP A	EA
621.246 Large Deciduous Tree (3'-4') GP A	EA
621.54 Deciduous Shrubs (18"-24") GP A	EA
621.80 Establishment Period	LS
621.93 Tree Shelters	EA

SPECIAL PROVISION
SECTION 621 - LANDSCAPING
(Streambank Rehabilitation Plantings)

621.0001 Description. This work shall consist of furnishing labor, equipment and materials for installing tubeling-sized shrubs on the rehabilitated/regraded streambank areas. This section also includes the care and replacement of plant materials during the Plant Establishment Period, all in accordance with the specifications, planting plans and schedules, and the directions of the Resident.

621.0002 Plant Materials – General

Tubelings. All shrubs planted in the streambank rehabilitation areas shall be tubelings, which are rooted cuttings or seedlings grown and supplied in at least 5-inch long, soil-filled tubes. Tubelings shall have a well rooted condition evidenced by the firmness of the mass of soil and roots. The stems of tubelings typically range from 8”–24” in height. The species to be planted as tubelings shall be those listed on the plans as Group B.

Possible sources:

New England Wetland Plants, Inc.
800 Main Street
Amherst, MA 01002
414-256-1752
<http://www.newp.com/>

Pierson Nurseries
24 Buzzell Road
Biddeford, Maine 04005
207-499-2994

Fertilizer. No fertilizer shall be added to the planting holes at the time the tubeling shrubs are planted.

Mulch. Plants installed on the rehabilitated river bank areas will be installed through the extended-use erosion control blankets and will not require placement of a separate mulch material.

Wire Layout Flags. Wire flags for laying out tubeling shrub plantings shall be a minimum of 21 inches high. The Contractor shall supply a minimum of 5 different flag colors to allow for plant layout by species.

621.0006 Inspection. Add the following:

Changes in quantities, sizes, species or quality of plants from these specifications will be permitted only with prior approval by the Resident. Any substitution requests shall be submitted to the Resident in writing at least 21 days prior to planting. Substitutions that are not pre-approved will be rejected upon delivery to the site.

621.0018 Layout. Add the following:

A Wetland Specialist will be on-site to assist the Resident in determining plant layout and monitoring plant installation. The Contractor shall assist the Resident in plant layout by developing a color-coded layout system, and by providing a sufficient number of flags as described above for use by the Wetland Specialist in layout. A skilled laborer will be provided by the Contractor to assist the Wetland Specialist in transporting, counting and installing layout flags.

The tubeling shrubs shall be installed in the streambank rehabilitation areas as shown on the Plans. The location of these streambank planting areas as shown on the Plans shall be considered approximate, and will be adjusted by the Wetland Specialist following the completion of the streambank regrading. In general, the bank plantings will be laid out in closely-spaced (i.e., +/- 18 inches on center), staggered rows to provide dense, continuous bank coverage.

621.0019 Planting Pits and Beds. Add the following:

All plantings are Class B, to be planted in existing (regraded) soil. Planting will occur after seeding and placement of the extended-use erosion control blanket (ECB) on the regraded streambank areas. Due to the small size of the tubelings' root mass, plant pits will not need to be dug in the typical manner. Rather, at each flagged plant location, the Contractor shall cut the ECB in an "X" or "U" pattern to allow planting of the tubeling. The cut in the blanket shall be just large enough (i.e., approximately 3–4 inches in diameter) to insert a dibble pole or similar implement for forming the planting hole. The dibble pole or similar implement shall then be used to make a hole in the soil of sufficient size and depth to insert the tubeling.

621.0020 Planting Seasons. Substitute the following for the dates applicable to this project:

Potted & Container-Grown Plants:
Fall – July 30 to September 26
Spring - May 1 to June 15.

621.0023 Setting Plants. The root mass of the tubeling (with soil attached) shall be placed in the prepared planting hole and set at a level that allows the base of the stem to be approximately 0.5 inches above the existing soil surface. The plants shall be set plumb and straight in the prepared holes. Soil around the plant shall be tamped firm to

remove any air pockets around the roots. Care shall be taken not to damage the plant's root system. Once the plant is properly set, any loose flaps of the ECB shall be put back into place and staked securely using the 8-inch metal staples specified in Special Provision Section 613 (Extended Use Erosion Control Blanket – Coir). Plants shall be thoroughly watered the day they are installed. The Resident will reject any plants not installed correctly and the Contractor shall re-install plant stock as determined by the Resident.

621.0026 Mulching. This subsection is revised to read:

In place of mulch, the disturbed area of the planting holes shall be re-covered with the extended use ECB as outlined above in Subsection 621.0023 of this Special Provision.

621.0027 Cultivation The entire subsection is revised to read:

Due to the need to establish a quick, dense cover of herbaceous growth in the streambank rehabilitation areas to provide erosion control, only minimal weeding shall be necessary in these areas to protect the planted shrubs. The contractor shall remove, by hand, weeds that jeopardize the survival of the installed shrubs. Cultivation or herbicides will not be allowed. There will be no payment for unsatisfactory work.

621.0036 Establishment Period The Establishment Period for plantings in this contract shall conform to Subsection 621.0036 of the Standard Specifications, and shall extend for two years from the end of planting. It shall also conform to the following:

Throughout the Establishment Period, the Contractor shall check, repair, and re-stake the extended-use ECB around the base of all tubelings installed in the streambank rehabilitation areas. The Contractor shall keep records for all maintenance work performed, locations and quantities of plant losses and replacements, and diagnosis of unhealthy plant material. This record shall be submitted to the Resident in the monthly written reports in accordance with Subsection 621.0036 of the Standard Specifications.

621.0037 Method of Measurement The quantity of plants to be measured for payment will be the number of individual plants furnished and planted, as required and accepted, excluding replacements.

621.0038 Basis of Payment. Each item of streambank rehabilitation plantings in the streambank rehabilitation area will be paid for at the contract unit price for each accepted plant furnished and planted. Payment shall constitute full compensation for furnishing and placing plants, cutting holes in the ECB and preparing planting holes, planting, watering, replacing and staking ECB flaps around plants as needed, pruning, and cleanup of planting area; for all ECB anchor stakes, and other necessary materials; all labor, equipment, and tools and any other incidentals necessary to complete the work.

At the time of Final Acceptance the Contractor shall provide a signed, valid and enforceable Warranty or Maintenance Bond in accordance with the requirements of Section 110.2.3 of the Standard Specifications. The Establishment Period item will be paid for at the contract unit price upon receipt of the Warranty or Maintenance Bond.

Payment will be made under:

<u>Pay Item</u>		<u>Pay Unit</u>
621.53	Deciduous Shrubs (8"–15") GP B	EA
621.80	Establishment Period	LS

SPECIAL PROVISION
SECTION 631 - EQUIPMENT RENTAL
(Mowing Machine Rental)

631.01 Description. This work shall consist of furnishing and operating a mowing machine to mow the field within the floodplain restoration area in preparation for planting trees and shrubs as directed by the Resident. There shall be two mowings, one during mid-summer of 2003 (approximately late June to mid July), and another just prior to planting (approximately late August to mid September) of 2003.

631.02 General. The mowing machine used for work under this section shall conform to the following minimum requirements:

Mowing Machine - Rear-mount rotary cutter mounted on a small (40 hp minimum) pneumatic-tired utility tractor.

All other provisions shall be in accordance with Section 631 – Equipment Rental

631.08 Basis of Payment. Payment will be made in accordance with Section 631.08 under:

<u>Pay Item</u>	<u>Pay Unit</u>
631.19 Mowing Machine Rental (including operator and hauler)	Hour

SPECIAL PROVISION
SECTION 656
Temporary Soil Erosion and Water Pollution Control

Standard Specifications, Section 656 is deleted and replaced by this Special Provision. The following information and requirements apply specifically to this Project.

- 1) If the Work includes the handling or storage of petroleum products or Hazardous Materials including the on site fueling of Equipment, the Resident must be provided with a Spill Prevention Control and Countermeasure Plan (SPCCP) plan for his/her approval. At a minimum, the SPCCP shall include:
 - a) The name and emergency response numbers (telephone number, cellular phone and pager numbers, if applicable) of the Contractor's representative responsible for spill prevention;
 - b) General description and location of (1) handling, transfer, storage, and containment facilities of such products or Materials ("activities and facilities") and (2) potential receptors of such products or Materials including oceans, lakes, ponds, rivers, streams, wetlands, and sand and gravel aquifers ("sensitive resources") including the distances between said activities and facilities and said sensitive resources;
 - c) Description of preventative measures to be used to minimize the possibility of a spill including Equipment and/or Materials to be used to prevent discharges including absorbent Materials,
 - d) A contingency response plan to be implemented if a spill should occur including a list of emergency phone/pager numbers including the Contractor's representative, MDEP Spill Response, the Resident, and local police and fire authorities. For a related provision, see *Standard Specification, Section 105.2.2 - Project Specific Emergency Planning*.
- 2) The following information and requirements will constitute the Soil Erosion and Water Pollution Control Plan for this Project. The soil erosion and water pollution control measures associated with this Work are as follows:
 - a) All references to the Maine Department of Transportation Best Management Practices for Erosion and Sediment Control (a.k.a. Best Management Practices manual or BMP Manual) are a reference to the latest revision of said manual. The "Table of Contents" of the latest version is dated "1/19/00" (available at <http://www.state.me.us/mdot/mainhtml/bmp/bmpjan2000.pdf>.) **Procedures specified shall be according to the BMP Manual unless stated otherwise.**

Any and all references to "bark mulch" or "composted bark mix" shall be a reference to "Erosion Control Mix" in accordance with *Standard Specification, Section 619 – Mulch*.
 - b) This project is on the banks of the Royal River, which is listed as a Class A stream and is considered **SENSITIVE** in accordance with the BMP Manual. The Contractor's

SPECIAL PROVISION
SECTION 656
Temporary Soil Erosion and Water Pollution Control

SEWPCP shall comply with Section II.B., Guidelines for Sensitive Waterbodies in the BMP Manual.

- c) The on-site person responsible for implementation of this plan, shall be the Contractor's Superintendent or other supervisory employee (the "Environmental Coordinator") with the authority to immediately remedy any deficient controls and shall provide the Resident with their numbers (telephone number, cellular phone and pager numbers, if applicable) where the Environmental Coordinator can be reached 24 hours a day.
- d) **A preconstruction field review is mandatory for this project.** The preconstruction field review shall take place before commencing any Work that involves soil disturbance or potential impacts on water quality. Attendees shall include the Contractor's Environmental Coordinator, the Department's Resident, the ENV Water Resources Unit, and the Wetland Specialist. The date and time shall be set by the Contractor in consultation with the Resident.
- e) All areas of newly disturbed earth, other than the plant pits, shall be mulched with straw by the end of each workday. All previously mulched areas shall be maintained on a daily basis.
- f) If earth materials will be stockpiled for re-use on-site they shall be mulched with straw by the end of each workday and contained, as necessary, to prevent sediments from entering any drainage system or from washing into the Royal River.
- g) If vehicle traffic at the site causes rutting of the access road or soil surface traffic shall cease, runoff shall be diverted from the road to a filter area, and the ruts repaired.
- h) The Environmental Coordinator must inspect and maintain daily all erosion and sediment controls for the duration of the project.
- i) Permanent stabilization measures shall be applied within one week of the last soil disturbance, except along the streambank where they shall be applied by the end of each workday.
- j) Streamflow shall be maintained at all times.
- k) The stream bank stabilization phase of this project is to be done during periods of low flow and in accordance with Section 105 and Section 107 of the Special Provisions. Cofferdams are not required for this project. If in-water Work is to occur, it is expected to be minimal and the Contractor shall do so slowly and in a manner that minimizes sediment discharge to the river. This process shall be monitored by the Resident and the Wetland Biologist and if Work is determined to be unacceptable it shall be suspended and the procedures or design modified.
- l) Any costs related to this Plan shall be considered incidental to the Contract.



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
STATE HOUSE STATION 17 AUGUSTA, MAINE 04333

DEPARTMENT ORDER

IN THE MATTER OF

MAINE DEPARTMENT OF TRANSPORTATION
New Gloucester & Poland
CUMBERLAND & ANDROSCOGGIN COUNTIES
ROUTE 26 BYPASS & RECONSTRUCTION
L-21048-TG-A-N (approval)

New Gloucester - Poland 3517.20

) NATURAL RESOURCES PROTECTION ACT
) FRESHWATER WETLAND ALTERATION AND
) WATER QUALITY CERTIFICATION
) FINDINGS OF FACT AND ORDER

Pursuant to the provisions of 38 M.R.S.A. Sections 480-A et seq. and Section 401 of the Federal Water Pollution Control Act, the Department of Environmental Protection has considered the application of MAINE DEPARTMENT OF TRANSPORTATION with the supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

1. PROJECT DESCRIPTION:

A. Summary of Proposal: The applicant proposes to reconstruct a 5.24 mile section of Route 26 in New Gloucester and Poland and to construct two new bypasses around Sabbathday Lake and Shaker Village to improve traffic flow and safety. The proposed bypass alignments and drainage improvements will eliminate several dangerous curves on Route 26, prevent the direct discharge of stormwater runoff and highway pollutants from Route 26 into Sabbathday Lake, and improve traffic flow around Shaker Village, a historic resource. The rehabilitation of the existing road will include new shoulders, regrading and stabilizing ditch-lines, and the installation of a closed drainage system and curbing at Sabbathday Lake and Shaker Village. The proposed project requires the alteration and filling of approximately 3.37 acres of freshwater wetlands and the installation of new culverts or the extension of existing culverts on seven streams. The proposed project is shown on a set of plans, the first of which is entitled "New Gloucester/Poland (3517.20)", prepared by CLD Engineering, and dated July 24, 2002.

B. Site Description: The two new bypass alignments are west of Route 26, and are shown in Exhibit 3 of the application. The southerly bypass begins in the vicinity of the Gray/New Gloucester town line and reconnects to Route 26 in the vicinity of Brackett Road. The northerly bypass extends from Abby Lane around Shaker Village and reconnects to Route 26 adjacent to the outlet to Shaker Bog in Poland. Both bypass corridors are wooded and undeveloped.

2. WATER QUALITY AND EROSION CONTROL CONSIDERATIONS:

The applicant proposes to protect surface water quality by installing and maintaining the Best Management Practices found in its revised Erosion and Sedimentation Control Manual dated January 19, 2000. Permanent erosion control measures are shown on the plans in Exhibit 5. Temporary erosion control measures will be outlined in an Erosion

Control Plan written by the contractor. The applicant requires the contractor to write and submit the Erosion Control Plan prior to construction. In addition, the applicant developed special erosion and sedimentation control measures for the project contract to provide additional water quality protection before, during, and after project construction. The Department finds that the applicant must submit to the Department a copy of the contractor's Erosion Control Plan prior to construction. The Department further finds that the applicant's proposed erosion control plan is adequate to protect water quality provided that all measures are properly installed and maintained until the site is stabilized with vegetation or other permanent measures.

3. HABITAT CONSIDERATIONS:

The Department of Inland Fisheries and Wildlife (IF&W) reviewed the proposed project and commented that the proposed project would not impact any essential or significant wildlife habitats or other wildlife habitats of special concern. IF&W recommended that all instream work be performed during low water from July 1 to September 30 and all culverts be imbedded a minimum of 6 inches into the substrate to allow fish passage. Two of the brooks along the corridor, Mosquito Brook and Wescott Brook, support wild brook trout populations. The applicant agreed to follow these recommendations.

4. WETLAND CONSIDERATIONS:

The applicant proposes to alter 3.37 acres of freshwater wetland habitat along the project corridor. The direct filling in the Mosquito Brook floodplain is the largest single impact at 0.95 acres. The wetland types being impacted include emergent, scrub-shrub, and forested. The three primary functions being impacted by the project are flood storage, water quality protection, and wildlife habitat.

The Wetland Protection Rules, Chapter 310, require that the applicant meet the following standards:

- a. Avoidance. No activity, which would cause a loss in wetland area, functions and values will be permitted if there is a practicable alternative to the project that will be less damaging to the environment. The applicant evaluated a range of alternatives that considered project needs, engineering design, and environmental impacts and developed six preliminary alternatives. From these preliminary alternatives, the applicant identified, developed, and evaluated 14 alternatives which included 5 build alternatives and their modifications and a no-build alternative. Based on further assessment, the applicant selected an alternative that avoided direct impacts to Sabbathday Lake and Shaker Bog. The Department finds that the applicant selected the least environmentally damaging practicable alternative that meets the project purpose.
- b. Minimal Alteration. The applicant is required to minimize the amount of wetland impact while meeting the project's purpose. The applicant proposes to minimize impacts by using 2:1 side slopes next to wetlands and by installing all culverts perpendicular to the stream

channels. The Department finds that the applicant has met the standard for minimal alteration.

- c. Compensation. The applicant is required to replace lost wetland functions and values associated with project impacts. The Wetland Protection Rules require minimum compensation ratios to replace lost functions and values. These ratios are 1:1 for impacts in wetlands not of special significance, 2:1 for impacts in wetlands of special significance, and 8:1 for preservation in all wetlands. The required compensation amount for the proposed project is 4.37 acres.

After conducting a field search of over 70 potential mitigation sites, the applicant submitted a compensation plan that includes on-site and off-site mitigation. The proposed compensation plan is entitled "Preliminary Wetland Mitigation Plan, MDOT Route 26 Reconstruction Project, New Gloucester and Poland, Maine," prepared by Woodlot Alternatives, Inc. and dated August 2002. The proposed on-site mitigation includes the removal of a section of the old Route 26 highway and the restoration and preservation of emergent, scrub-shrub, and forested wetlands in the vicinity of Mosquito Brook. The proposed off-site mitigation includes wetland restoration, floodplain enhancement, and wetland and upland preservation along the Royal River. Both mitigation sites are in New Gloucester. The total mitigation credit for the compensation plan is 6.45 acres.

The Mosquito Brook and Royal River mitigation sites will be protected from future development by deed restrictions and conservation easements. The applicant owns the Mosquito Brook site and submitted a draft declaration of covenant and restrictions to protect this area in perpetuity dated May 17, 2002. The Royal River mitigation site is north of Route 231 and was identified by the New Gloucester Land Trust and the Friends of the Royal River as having important resource values. The site includes two contiguous parcels in separate ownership. The first parcel is owned by Eugenia and Charles Gauvin. The applicant submitted a draft deed of conservation easement dated February 26, 2003 for this 15.18 acre parcel of undeveloped land that is identified as Lots 59 and 74 on Municipal Tax Map 7. The second parcel is 11 acres and is owned by Norton Lamb. The applicant also submitted a draft deed of conservation easement dated February 26, 2003 for this parcel that is identified as Lots 57 and 73 on Municipal Tax Map 7. The Royal River site is shown on a plan entitled "Right of Way Map, Wetland Mitigation Sites, New Gloucester, Cumberland County," prepared by the Maine Department of Transportation, and dated January 2003.

The Department finds that the applicant met the standard for compensation by offsetting the loss of wetland functions and values for 3.37 acres of project impacts. The Department finds that the applicant must submit the recorded conservation easements to the Department for the Royal River site and the recorded deed restrictions for the Mosquito Brook site prior to August 15, 2003.

5. OTHER CONSIDERATIONS:

The Department has not identified any other issues involving existing scenic, aesthetic, or navigational uses, the natural transfer of soil, natural flow of water, or flooding.

BASED on the above findings of fact, and subject to the conditions listed below, the Department makes the following conclusions pursuant to 38 M.R.S.A. Sections 480-A et seq. and Section 401 of the Federal Water Pollution Control Act:

- A. The proposed activity will not unreasonably interfere with existing scenic, aesthetic, recreational, or navigational uses.
- B. The proposed activity will not cause unreasonable erosion of soil or sediment provided that the applicant submits to the Department a copy of the contractor's Erosion Control Plan prior to construction.
- C. The proposed activity will not unreasonably inhibit the natural transfer of soil from the terrestrial to the marine or freshwater environment.
- D. The proposed activity will not unreasonably harm any significant wildlife habitat, threatened or endangered plant habitat, aquatic habitat, travel corridor, freshwater, estuarine, or marine fisheries or other aquatic life.
- E. The proposed activity will not unreasonably harm any freshwater wetland plant habitat provided that the recorded conservation easements for the Royal River mitigation site and the recorded deed restrictions for the Mosquito Brook mitigation site are submitted to the Department prior to August 15, 2003.
- F. The proposed activity will not unreasonably interfere with the natural flow of any surface or subsurface waters.
- G. The proposed activity will not violate any state water quality law including those governing the classifications of the State's waters.
- H. The proposed activity will not unreasonably cause or increase the flooding of the alteration area or adjacent properties.
- I. The proposed activity is not on or adjacent to a sand dune.
- J. The proposed activity is not on an outstanding river segment as noted in Title 38 M.R.S.A. Section 480-P.

THEREFORE, the Department APPROVES the above noted application of the MAINE DEPARTMENT OF TRANSPORTATION for Route 26 highway and bypass construction, SUBJECT TO THE ATTACHED CONDITIONS, and all applicable standards and regulations:

- 1. Standard Conditions of Approval, a copy attached.

2. The applicant shall take all necessary measures to ensure that its activities or those of its agents do not result in measurable erosion of soil on the site during the construction of the project covered by this approval.
3. The applicant shall submit to the Department a copy of the contractor's Erosion Control Plan prior to construction.
4. The applicant shall submit to the Department the recorded conservation easements for the Royal River mitigation site and the recorded deed restrictions for the Mosquito Brook mitigation site prior to August 15, 2003.

THIS APPROVAL DOES NOT CONSTITUTE OR SUBSTITUTE FOR ANY OTHER REQUIRED STATE, FEDERAL OR LOCAL APPROVALS NOR DOES IT VERIFY COMPLIANCE WITH ANY APPLICABLE SHORELAND ZONING ORDINANCES.

*DONE AND DATED AT AUGUSTA, MAINE, THIS 13th DAY OF March, 2003.
Correcting the order dated February 28, 2002. The effective and expiration dates remain the same as in the original order.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

By:

Dawn R. Gallagher
DAWN R. GALLAGHER, COMMISSIONER

PLEASE NOTE THE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES...

Date of initial receipt of application 8/22/2002

Date of application acceptance 8/29/2002

Date application approved 2/28/2003

Date filed with Board of Environmental Protection
DBB/L21048AN

